



# Signs of Betterment

Government forecasts indicate that more diversified crops will be produced this year and at less expense than for many years. It is expected that in the next few months there will be realized from farm products at least \$12,000,000,000 of new wealth to be turned into the channels of trade, stimulating all lines of business.

Industry and agriculture generally are on a sounder basis and in a position to realize on economies effected in their operations. One of the lessons learned during the depression is that distribution and marketing are equal in importance to volume of production in our highly industrialized civilization. Output controlled in relation to a demand properly stimulated by constant and intelligent sales effort is a key to the solution of existing conditions. Over-production has brought satiety and clogged the flow of trade.

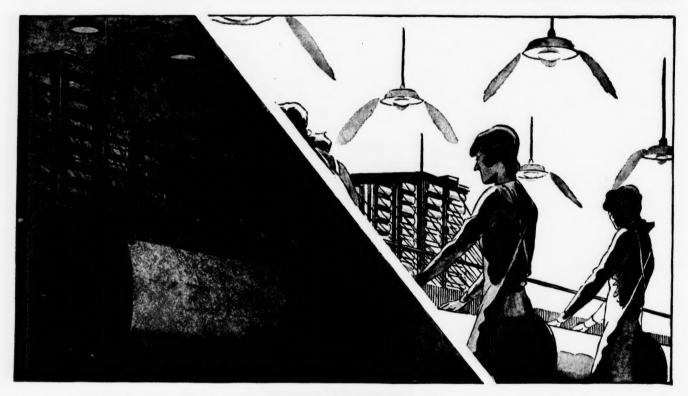
We are learning a better appreciation of true values, as well as a saner method of doing business, of fitting our products in quantity and quality to the demand for them.

Signs appear to be pointing to an end of the depression. There has been a noticeable increase in building permits in a number of Southern cities for the month of April. The total value of construction and engineering contracts awarded in April in the South shows a considerable advance over preceding months and over April a year ago.

The people of this country, to whom the world looks for leadership in industry, require a definite outlook. They have not been able to see their way through a depression that had more conflicting elements than any depression of the past. Students of economics and business agree that the state of the public mind has had a great deal to do with the let-down in buying. Buyers hesitate in a declining market.

But the road ahead is getting a little clearer. The cash returns from crops, particularly in states which were in a dire way last year from the drought, will have a most wholesome effect. It is probable that instead of the dullness of a summer period, which industry in many lines always faces, there will be more activity this summer than there was last. Those familiar with business history call attention to the fact that previous depressions have usually had their turn for the better with the returns from crops.

# Iwilight Zone\* LOSSES... N UNSEEN ITEM IN FACTORY OVERHEAD



Even the most careful cost analysis may often fail to show the true reason for excessive overhead in factory operation. For, in thousands of American factories, there is an unseen cost item that is never entered on the books.

Twilight Zone\* lighting is the unsuspected stumbling block to efficiency in every department. Its deceptive half-light seems sufficient, but actually, it positively prevents either visual or manual accuracy. Office errors run unreasonably high...spoilage of material becomes excessive... accidents and labor troubles multiply.



#### In the Westinghouse Lighting Institute

A fully-equipped factory demonstrates correct illumination for modern industrial plants.

Open to visitors

Daily 9 to 5 . . . Saturday 9 to 12

7th Floor, Grand Central Palace

New York City

. . . around the corner from your hotel.

If your present costs are unsatisfactory, why not test your plant for Twilight Zone? Lighting Specialists of your local light and power company or the Westinghouse organization are always ready to assist you in detecting and eliminating this unnecessary source of loss.

#### Out of the Twilight Zone

An instructive book, "The Way Out Of The Twilight Zone" will be sent to anyone interested in cutting costs with light. Write Westinghouse Lamp Company, Department 203, 150 Broadway, New York, N. Y.

\*The deceptive half-light between obvious darkness and adequate illumination.

CONSULT A LIGHTING SPECIALIST ON YOUR LIGHTING PROBLEM

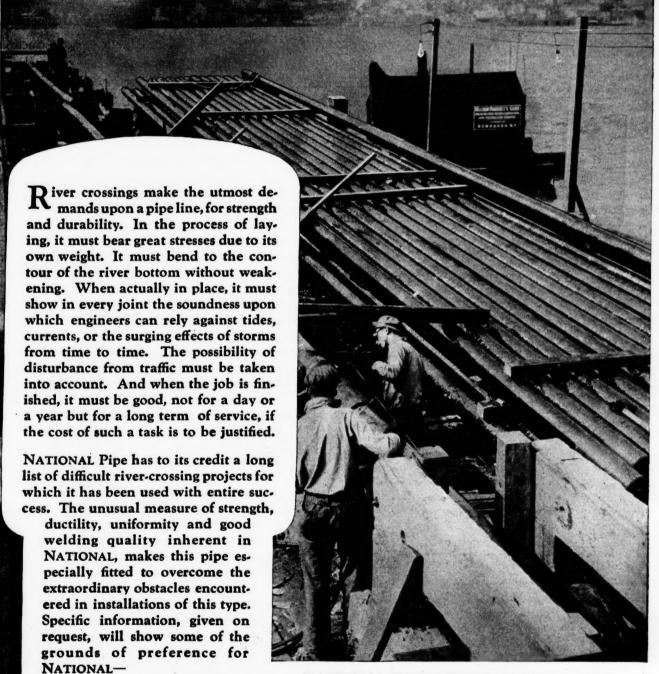


Westinghouse



Entered as second-class matter at the Postoffice, Baltimore, Md., under the act of March 3, 1879.

# BETWEEN THE SHORE LINES EXTRA SECURITY IS NEEDED



NATIONAL TUBE COMPANY. Pittsburgh, Pa. Subsidiary of United The States Steel Corporation

# NATIONAL PIPE

America's Standard Wrought Pipe

## SAVE DOLLARS

### with fast material-handling

It's the every-day performance of electric industrial trucks, equipped with Exide-Ironclads, that proves their economy

HERE'S one way to reduce production costs in your plant. Use electric industrial trucks powered by Exide-Iron clad Batteries, for all material-handling jobs possible.

Many large concerns throughout the United States have already proved that they save actual dollars this way. They have found that electric trucks move material speedily, easily, and with economy. And give dependable, low-cost operation when powered by Exide-Ironclad Batteries.

It's the decidedly different construction of the Exide-Ironclad Battery that makes it give such reliable service with minimum care and attention . . . have such a long life . . . save owner's money.

Investigate the many dollar-saving advantages of having Exide-Ironclads do your handling jobs. Write for Bulletin, "Adaptability of Electric Industrial Trucks and Tractors." No obligation.



Exide-Institute constraints.

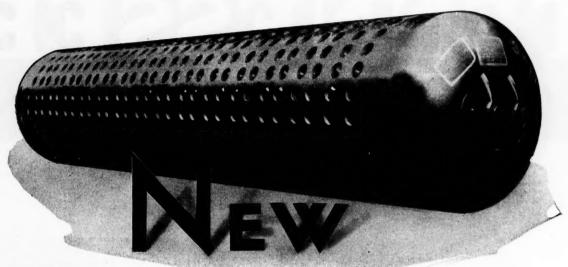
ITS EASY, economical and fast ... handling material with electric industrial trucks powered to Exide-Institute in tens. On the BATTERIES IRONELAD BATTERIES

[Confirming letter in our file.]

[Exide Confirming letter in our file.]

THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia
THE WORLD'S LARGEST MANUFACTURERS OF STORAGE BATTERIES FOR EVERY PURPOSE

Exide Batteries of Canada, Limited, Toronto



Boiler Drum fabricated for The Brown Paper Mill, Incorporated, of Munroe, Louisiana. This drum is 36" I. D., 16' long and is designed for 207 lbs. per sq. in. working pressure. It is insured by the Hartford Steam Boiler Inspection and Insurance Company.

# Fusion Welded Power-Boiler Drum



In addition to this book, The Babcock & Wilcox Company will send, without obligation, a set of articles on fusion welding written by leading writers for the technical press. The illustration above shows the latest development in power boilers. All seams of this drum were welded by the new Babcock & Wilcox process which consistently produces welds equal to or better than A. S. M. E. boiler plate in tensile strength, ductility, shock resistance, and ability to withstand repeated applications of pressure.

To provide definite proof of the soundness of the welds in this drum every inch of every seam has been explored with a powerful X-Ray machine.

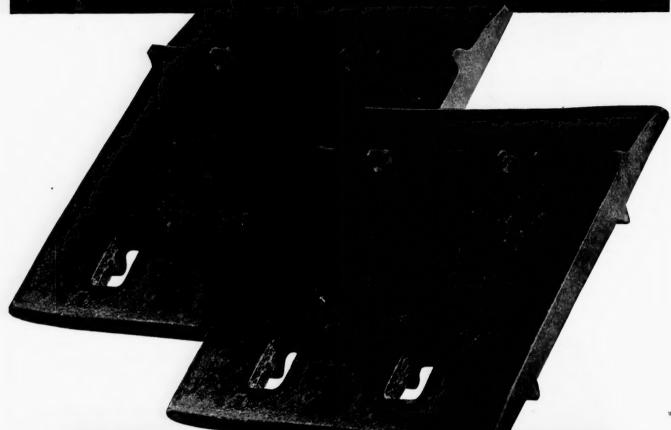
The Company's bulletin Fusion Welding describes in detail the characteristics of welds produced by this new technique and shows the tests employed to check the soundness of welds in finished products. Copies of this publication will be supplied upon request ... simply ask for Bulletin S-10.

Pending action on the proposed A. S. M. E. Code for welded boiler drums The Babcock & Wilcox Company offers this construction only in Non-Code States and subject to the appoval of the boiler insurance companies.

BABCOCK & WILCOX

BE LIBERTY ST. COMPANY NEW YORK, N. Y.

# ENNESS TE PLATI



# -for Superior Service

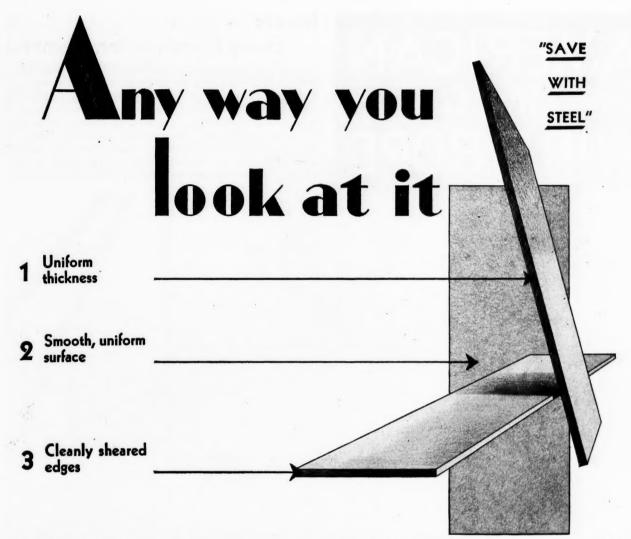
TENNESSEE High Carbon Hot Worked Tie Plates represent the highest standards of tie plate excellence. Being of rail steel carbon, they endure with the rail and their method of manufacture, which includes an annealing process, so toughens them that breakage is reduced to a negligible minimum. They present a remarkable resistance to corrosion . . . a fact which has been amply demonstrated by tests under various service conditions over a period of years. These plates are standard with many of the largest trunk lines in the country and their continued purchase year after year is convincing evidence of their superior quality and design, and that they have stood the test of service.

## TENNESSEE COAL, IRON & RAILROAD COMPANY General Offices: Brown-Marx Building, Birmingham, Ala.

Subsidiary of United States Steel Corporation

PRINCIPAL SUBSIDIARY MANUFACTURING COMPANIES

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# THERE'S A DECIDED ADVANTAGE IN USING GULFSTEEL PRECISION PLATES

For whatever purpose you use GULF-STEEL Precision Plates—tank construction, battle deck floors, bridge fabrication, etc., their uniformity and precision will facilitate welding or joining, and make the job look better as well as wear better. GULFSTEEL Precision

Plates are made in the only plate mill in the United States with automatic screw-down control, that insures rolling to greater ac-

curacy of thickness. Don't be satisfied with ordinary plates when you can buy GULFSTEEL Precision Plates at the same price. Send us your inquiries.

REG. U. S. PAT. OFF.

### **GULF STATES STEEL COMPANY**

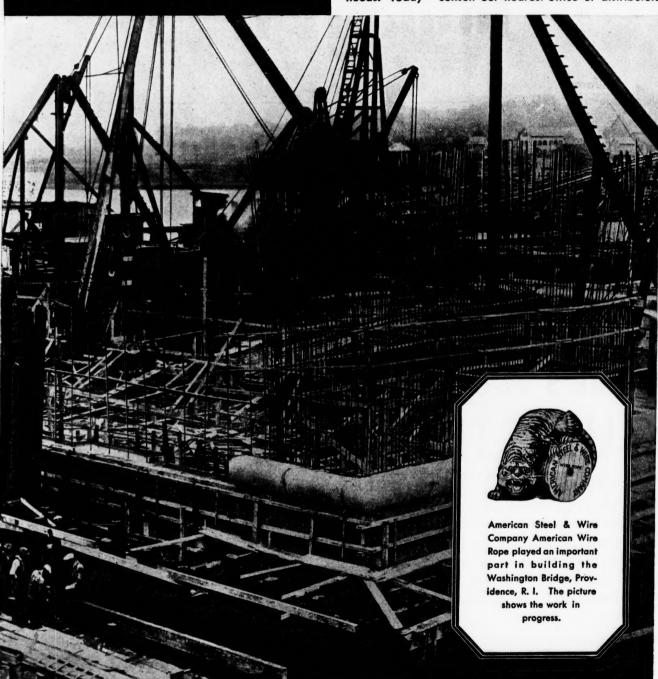
BIRMINGHAM, ALABAMA

# GULFSTEEL

# AMERICAN STEEL & WIRE COMPANY WIRE ROPE

#### Meets **Every Construction Demand**

Only an outstanding degree of superiority in construction work, could have won an almost universal demand for American Steel & Wire Company Wire Rope. Ability to stand up under the most gruelling punishment—marked reduction in replacement costs—and constant dependability, are reasons why it is generally specified. Made by the American Steel & Wire Company—you are assured of dependable service and a rope exactly suited to your needs. Today—consult our nearest office or distributor.



#### AMERICAN STEEL & WIRE COMPANY

208 South La Salle Street, Chicago SUBSIDIARY OF UNITED STATES STEEL CORPORATION Pacific Coast Distributors: Columbia Steel Company, Russ Bullding, San Fre

And All Principal Cities Export Distributors: United States Steel Products Company, New York

#### A TRADITION OF FINE CRAFTSMANSHIP

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Mixing Kettles

Large Diameter Steel Pipe

Autoclaves

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Special Vessels

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Alco steel plate products are made by men to whom the highest standards of workmanship in heavy-duty plate fabrication have become an unquestioned tradition.

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DIVISION OF AMERICAN LOCOMOTIVE COMPANY

# Save Money by using

# GELEX

GELEX No. 1 GELEX No. 2 GELEX A

# These du Pont dynamites have already reduced blasting costs

in mining iron, lead, zinc, molybdenum, limestone, gypsum and clay;

in quarrying limestone, granite and trap rock;

in excavating for railroad and bridge construction;

and in driving railroad and sewer tunnels.

YNAMITES of the Gelex type are designed expressly to decrease the cost of blasting in work that has been done heretofore with ammonia gelatin ranging from 35 to 60 per cent strength or with 40 or 60 per cent high density ammonia dynamite.

They will not give as good results as these older explosives in every operation—much depends upon

local conditions—but Gelex has lowered costs in many operations.

Gelex No. 1 and Gelex No. 2 stand between low density ammonia dynamite and gelatin dynamite—more cohesive and much more water resisting than ammonia dynamite but bulkier than gelatin. Gelex No. 1 averages 105 cartridges, 1½ by 8 inches, to the 50-pound case; Gelex No. 2 averages 120 cartridges. No. 1 has a bulk, or cartridge, strength of 60 per cent; No. 2 of 45 per cent. Both are adapted for underground as well as open work.

Gelex No. 1 has thus far found its chief usefulness in well-drill holes in limestone quarries.

Gelex No. 2 has been most successful as top load in well-drill holes in quarrying; as entire load in well-drill holes for excavating shale; in smaller



diameter holes in bench or low face limestone and gypsum quarries; and in limestone, gypsum, clay, lead, zinc and iron mines.

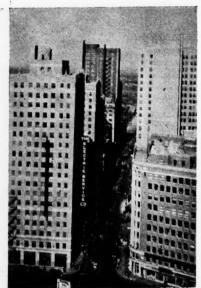
Gelex A has much the same characteristics as 60 per cent ammonia gelatin but is of slightly lower velocity and lower density, averaging 99 cartridges, 1½ by 8 inches, to the 50-pound case. It is plastic and water resisting and gives off a relatively small volume of harmful fumes. Gelex A has proved an efficient substitute for 60 per cent ammonia gelatin for blasting limestone,

granite and trap rock in quarrying and in excavating for construction work; for driving tunnels in sandstone and limestone; and for mining iron ore. At present this explosive is offered for sale only east of the Rocky Mountains.

If you think Gelex is adapted to your mining, quarrying or contracting requirements, tell us the conditions. Our extensive experiences may enable us to apply Gelex as a means to solve your problems.



E. I. DU PONT DE NEMOURS & CO., Inc. Explosives Dept. Wilmington, Delaware



ONE OF FORT WORTH'S HALF A DOZEN "CANYONS"

The growth of any city is in direct ratio to its transportation facilities, its industrial activities and the territory it serves.

Fort Worth's sure and steady development is due to these prime factors. It has the advantage in freight rates to twice as many destinations in Texas as any competing city.

This advantage will be enormously increased with the completion of a vast network of new lines now under construction or about to be started in North and West Texas and Southwestern Oklahoma.

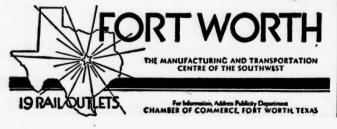
These new extensions will open up fabulously rich sections in West Texas and central Western Oklahoma and involve more than 1200 miles of new lines which will be built at a cost to exceed \$50,000,000.

The importance of the additional territory to be tapped by these new lines may be judged from the fact that the population of the 132 counties comprising West Texas has increased from 733,430 in 1900 to 1,889,396 in 1930 while the last census of agriculture showed the annual value of West Texas crop production to be \$23.73 per acre—this return from land selling at \$35.00 to \$75.00 per

The astute manufacturer will quickly grasp the importance of Fort Worth as a manufacturing point offering great future possibilities.

WRITE TODAY FOR YOUR COPY OF "INDUSTRIAL FORT WORTH

12 AIR LINES



# To the MANUFACTURER and DISTRIBUTOR

Abundant supplies of coal, coke, iron, timber and other raw materials lie in the regions of Georgia and Alabama, which are traversed by the

#### Central of Georgia Railway

Cheap electric power, numerous undeveloped waterpowers, good home markets and excellent shipping facilities. Therefore, manufacturing conditions are ideal.

Many of the cities on the Central of Georgia Railway occupy advantageous positions for distributing warehouses, and a number of the larger northern and eastern manufacturers supply their southeastern trade from branch houses in these cities.

Full and detailed information upon application.

J. M. MALLORY, General Industrial Agent 413 West Liberty St. SAVANNAH, GEORGIA

### Florida

Leads the Union in the production of citrus fruits and winter vegetables.

Cattle raising and dairying are also fast becoming leading industries of the state.

Soil—climate and ample rainfall are the main contributing factors.

You should investigate these and other opportunities that the state has to offer.

For information and literature—write

#### Model Land Company

Flagler System

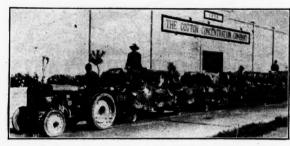
St. Augustine

Florida

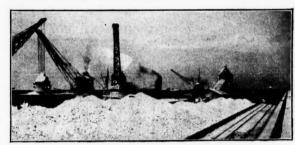
The late Henry M. Plagler and his organizations have served Florida since 1886

# GALVESTON is equipped

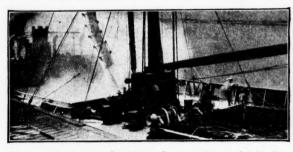
to handle any cargo—quickly—safely—economically



Motorized truck-trains speed the moving of shipments in warehouses and on the wharves.



Modern facilities for loading sulphur, in shipment of which Galveston leads all ports.



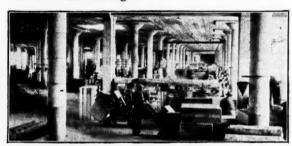
Wharves are equipped with modern machinery for loading cargoes direct from warehouses.



Huge grain elevators give Galveston a capacity of over nine million bushels.



Showing the compact arrangement of tracks, warehouses and wharves for fast handling.



Interior of one of the modern concrete warehouses, floored and sprinkler-protected.

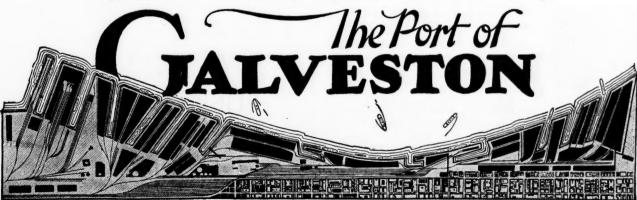
Whatever your cargo, it can be handled quickly, safely and economically through the Port of Galveston. We invite correspondence about specific import and export problems.

#### GALVESTON WHARF COMPANY

George Sealy, President

Established 1854
GALVESTON, TEXAS, U. S. A.

F. W. Parker, General Manager



### **PARKERSBURG**

At this city Kahn & Feldman are spinning silk. The Viscose Company, world's largest manufacturers of rayon, are producing "Crown Rayon."

Executives are requested to investigate the advantages of this, the gateway City between the Central West and the South.

#### **BOARD OF COMMERCE**

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Right in the heart of the Southern textile district are five centrally located Old Dominion box plants, to give you quicker service, lower freight rates and quality boxes that stand second to none. We are the largest producers of paper boxes in our particular line in the United States and are in position to fill your requirements for boxes with special design wraps on short notice. Let us quote you on your next order, there is no obligation.

OLD DOMINION BOX COMPANY, INC. Lynchburg, Va.

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West Pine at Kingshighway
beautiful Forest Park. Near b

Heiss Hotel System kmox

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You're right! None...
yet it is used and used
without discrimination.
This is a common condition... but not where
Rundle - Spence fountains are installed, because R-S bubblers are
outstandingly sanitary.
This is the only make
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a jet that lips cannot
touch. That is why Rundle-Spence Bubblers are
so universally accepted.



The complete line of R-S fountains, bath and plumbing fixtures and supplies is described in our new catalog. Write for it.

RUNDLE-SPENCE MFG. CO. 442 No. Fourth St., Milwaukee, Wis.

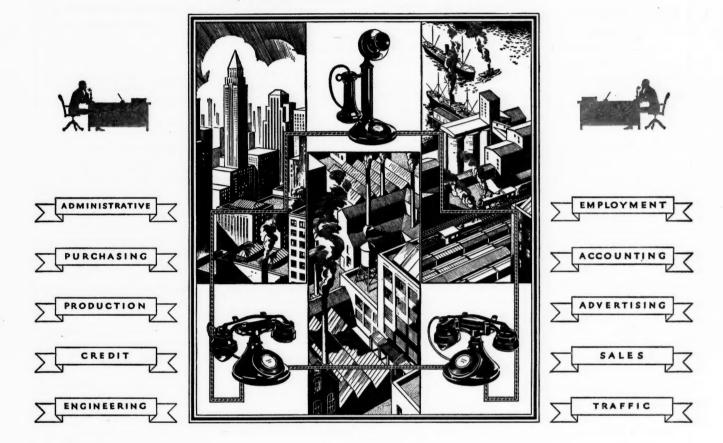
**RUNDLE-SPENCE** 

IPS CAN NOT TOUCH THE R-S NOZZL



### EVERY DEPARTMENT CAN CUT COSTS

... speed business ... by using Long Distance



TELEPHONING between cities is so quick, easy and inexpensive that there is practically no limit to the number or scope of things it accomplishes effectively.

The production manager of a factory equipment company keeps in constant touch with its construction crews which are at work in industrial plants throughout the country. A large automobile corporation makes hundreds of calls each month, divided as follows: sales department, 34%; production department, 46%; service department, 13%; other purposes, 7%.

The engineering department of a large corporation needed ten draftsmen immediately. The employment manager called a city in another state and concluded all arrangements in a few minutes. The men reported

for work the next day. The credit manager of a lumber firm finds inter-city service a direct solution to his credit problem. Telephone calls invariably get attention on overdue accounts. The traffic manager of a chain store organization uses the telephone extensively in tracing freight shipments.

In sales and purchasing . . . in administrative matters . . . in getting information or giving it . . . in adjusting misunderstandings . . . in maintaining important contacts . . . the telephone is an invaluable aid to every department of a business. Rates are low: Baltimore to New York, 90c. Atlanta to Memphis, \$1.65. Detroit to Chicago, \$1.15. Evening and night rates are still lower. To reach an-

night rates are still lower. To reach another city . . . reach for your telephone.

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**ACCOUNTANTS** 

**GEOLOGISTS** CONTRACTORS

Detailed classification of specialized work undertaken by those having cards in this Directory will be found in Classified Index.

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and Manufacturing Plants.
300 Builders Exchange Bios.
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Mfg. Plants, Buildings, Bridges, Dams, 1000 Met. Life Bldg MINNEAPOLIS, MINN.

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317 N. 11th St. ST. LOUIS, MO. 205 W. Wacker Drive, CHICAGO, ILL.

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Builders of Railroad and Highway Bridges River Improvement Work General Office, 215 Pershing Road (Union Station Plaza), KANSAS CITY, MO.

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535 Fifth Ave. NEW YORK CITY CHARLOTTE, NORTH CAROLINA

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The design and erection of concrete and steel structures.

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Hydraulie and Construction Engli

Dams a Specialty: Investigations, Estimates Free MANASSAS, VA.

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Virginia Engineering Co., inc General Onstractors Government — Municipal — Industrial Buildings — Power Plants — Heating Plumbing — Electrical — Highways Sewer and Water Systems — Dams Fire Protection — Refrigeration 1st Nat'l Bk. Bilg. NEWPORT NEWS, VA.

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State Planters Bank Bldg. RICHMOND, VA.

#### J. L. Myers & Sons

Drillers of Shallow and Deep Wells in the South Since 1894

Box 105, T. C. Station DENTON, TEXAS

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Charles James Mets President

Mem. American Institute of Accountants Certified Public Accountant of Georgia ATLANTA, GA.

#### Joe B. Martin

Quantity Burveys

CHARLOTTE. N. C.

#### Sistem Years Actual Esperience W. Wade Moss, Jr.

Chemist
Research and Creative Laboratories
Development of Industrial Processes
Special attention given to exploration of
Natural Resources of Southern States.
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**ENGINEERS** ERS CHEMISTS ACCOUNTANTS

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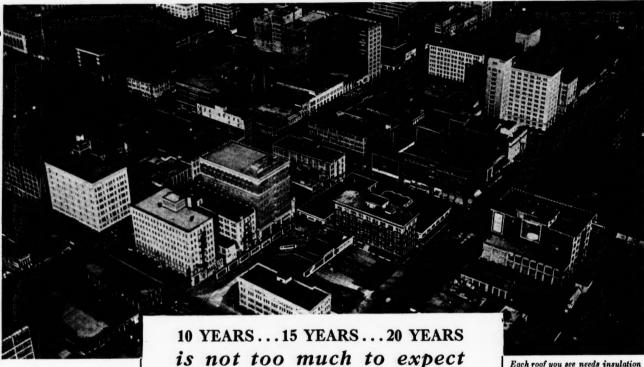


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Baltimore, Md., May 21, 1931

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#### MANUFACTURERS RECORD

MAIN OFFICE

Manufacturers Record Building,
Commerce and Water Streets,
Baltimore, Md.

Published Every Thursday
by the

Manufacturers Record
Publishing Co.
Frank Gould, President

BRANCH OFFICES
Chicago—11 S. LaSalle St.
New York—901 Singer Bldg.

Subscription Rates: \$6.50 a year (in advance); six months, \$3.50; three months, \$2.00 to United States, Mexico, Cuba, Porto Rico, Hawaii and the Philippines. For Canada add postage \$1.00 a year. For other foreign countries add postage \$3.50 a year. Single copies, 20c.; back numbers, one to six months, 50c. each; over six months, \$1.00.

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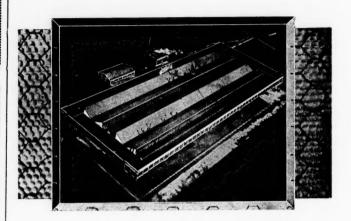
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# Manufacturers Record

Devoted to the Upbuilding of the Nation Through the Development of the South and Southwest as the Nation's Greatest Material Asset

Vol. XCIX No. 21

BALTIMORE, MAY 21, 1931

Single Copies, 20 Cents

# The Public Utility in Southern Upbuilding

PUBLIC utility power companies have played a dominant part in the rapid industrial expansion of the Southern States in the past decade. With a great network of interconnected systems supplying energy to cities, towns and rural communities, these companies are making possible a fuller utilization of the South's industrial resources and creating employment for its people. As developers of wealth, they have taken their place alongside the railroads which in opening up the vast interior of the country played a great part in enabling the United States to become a world power.

Like the railroads, the public utility power companies, through their development departments, have brought into their territories new industries, new capital and payrolls which have immeasurably added to the wealth of entire states. This phase of public utility activity is too often ignored, as shown in the attacks constantly being made on the utilities and in the efforts to place burdensome taxes and restrictions which would legislate them out of business. We are not unmindful that the power industry should pay its proportionate share of public expenses and we believe the industry has not protested against paying a fair tax. We are not unmindful that unbridled monopolistic control is detrimental to public welfare. Regulation rightfully applied is necessary and the public utilities accept this fact.

Measured in actual dollars and cents returned to the people, it is conceivable that public utility power concerns could be freed from all taxation and still be of more value to the states than the amount collected from them in taxes. They have made possible, in the service they offer, the establishment of industries which have added vast taxable wealth to states and communities. Increased service facilities for manufacturing have been of incalculable value in developing natural resources and creating employment. A power utility's field of activity is circumscribed, and it thrives to the extent that it can enlarge demand for service in its territory. In thus creating an expanding demand, it at the same time brings in new wealth and benefits the entire section through which it operates.

Recently the Manufacturers Record had occasion to investigate the results of development activities of some Southern public utilities. Six power companies, operating in eight Southern states, in the last five years have been mainly responsible for the establishment in their territories of nearly four hundred manufacturing plants representing an investment of about \$175,000,000 and having annual payrolls aggregating more than \$50,000,000. Without the development work of these companies it is probable that these four hundreds plants would not have been established, and thus the states and communities where they are located would have been deprived of the taxes from them, and the people would not have had this new source of employment.

In view of the efforts being made to place onerous taxes upon public utilities, these corporations should be considered for what they are, not merely "soulless corporations," detrimental to the public interest, but contributors to the wealth and well-being of the communities in which they operate. Is it not time for representatives of government to take due cognizance of this fact? This development work is of tremendous significance in the entire economic situation of the states where such plants have been located. In thus bringing in new industries to increase public utility business, the utilities have been contributors to the upbuilding of the South as a whole, and have been the means of giving the states new sources of taxable income otherwise not available.

The South's manufacturing, through the establish-

ment of the new industries mentioned, has been expanded and diversified, for the new plants embraced textiles, kaolin, frozen foods, ice, brick, coal, iron ore, limestone, electrical equipment, furniture and woodworking of various kinds, steel products, paper, dairy products, building board, cement, automobile bodies and other lines. In one state alone in 1930 new plants established—and not included in the total for the five years as above mentioned—represented more than 20 industrial classifications, many of which could not have been established had not adequate power been available.

Concerning the particular features of the development work of the various power companies operating in the South, it should be said that most of them maintain industrial departments which make surveys to determine the best locations for particular classes of industry, to make market studies and do much research work in developing new products that might be the basis for new industries in their territory. Virtually every one of these power companies cooperates to the fullest extent with communities and commercial organizations in their respective territories, and the service rendered in an advisory capacity to the different communities in negotiations with prospects is a valuable contribution toward the growth and development of the state. Furthermore, Southern power companies maintain Northern offices for following up prospective industrial business and are taking a far more important part in the industrial and commercial development of the various sections of the South than is generally realized.

The head of an industrial bureau of one power company in the South writes that the most important feature of his company's work is the effort being made to create such industries as are most needed to balance the industrial situation in the territory served. "Through our advertising campaigns and in our development work," he states, "we have made special efforts to attract industries to produce raw materials for some of our existing plants, and industries to consume the finished products of the mills in our territory. Both raw materials and markets exist locally for a variety of industries, including branches of textile manufacturing, furniture and woodworking, chemical and processed industries and many others. In our attempt to create additional industries in the future, we expect to concentrate our efforts on industries to take advantage of these special opportunities."

Here again is another evidence of the great service Southern public utilities are rendering to the South. Not only are they bringing in new plants, but they are aiding in establishing a well-rounded industrial development.

That public utility companies are one of the great forces today in Southern upbuilding, surpassing in some respects the constructive work of the railroads in the past, is illustrated in the following summary of what one of the larger power companies of the South is doing in this respect. When this company was established, the state in which it operates was a field of tremendous industrial and agricultural pos-

sibilities, but it was severely handicapped by lack of power in quantity and at reasonable rates. After the establishment some years ago of a new industries division, with an alert and competent personnel, the first step was to assemble accurate data on conditions in the territory. Surveys were made on every possible factor—on certain industries, undeveloped resources and conditions in various localities. Then followed the consistent use of business publications reaching the executives of industries, also a number of metropolitan daily papers were used to good advantage in paving the way for further sales efforts. Advertisements were published regularly discussing legislation, taxation, climate, labor conditions, living and building costs, raw material and power supply and other conditions in the state.

As an adjunct to this advertising, attractive directmail literature was distributed in response to requests and to selected lists of prospects. This educational work was supplemented by other publicity mediums for portraying the state's resources and industries and by exhibiting at national industrial expositions. A three-year period was used to good advantage in building up sentiment in the state for industrial development, in gathering further data on the state's resources and industries, and in establishing contacts with civic organizations and bankers to assist in the financing of industries, and other like cooperation. Gradually a growing sentiment for local and state development was created, in which the state's newspapers played the leading role. Civic spirit rose to new heights and resulted in important local developments in many communities and in great progress in matters within the province of the state government, such as roads and schools.

In the period 1925-1930, inclusive, 175 new industries were established in scores of communities throughout the state. They reported payrolls totaling approximately \$21,000,000 annually, and represented an initial capital investment of over \$69,000,000. The establishment of these industries may be said to have been directly or indirectly influenced by the program outlined in the foregoing and by the availability of dependable power.

Translated into general terms of benefit to the state, individual communities, and the man in the street, the establishment of new industries created new consumers of the state's raw materials and semi-finished products; thousands of new jobs for skilled and unskilled workers drawn from unprofitable and overcrowded agriculture; an increase in population; new payrolls; local markets and more consumers for farm and manufactured products; an increase in value of farm lands; an increase in taxable property; an increase in bank resources and credit facilities; new customers for every trade and profession, and other benefits too numerous to be detailed.

Whenever blatant denunciation of the "power trust" is heard, and whenever oppressive taxation and destructive regulation are proposed, it is well that the people should learn of and carefully consider what the public utility power interests are doing toward promoting the material welfare of the entire South.

#### South's Most Valuable Asset

N the past we have often referred to the large In the past we have often remarks the south. business and industrial leaders outside of the South. We have repeatedly stressed the fact that the greatest asset of the South is its young folk and that every possible effort should be made to give them opportunity for employment at home. It is a double loss to the state, after spending in the aggregate millions of dollars upon their education, to lose them at a time when they are just beginning to be of value as citizens and producers of wealth. Those who leave in search of employment in other sections cannot be severely censured, but we do believe that often parents too readily acquiese to the desire of sons or daughters after graduation to go any place, so long as it is away, to seek their fortune. Pastures always seem greenest far away. Opportunity surely is awaiting them in their home town or state.

Through the industrial expansion of the South in the past decade, young people today have far greater opportunities for advancement than were formerly possible. The efforts now being made to place school graduates with local concerns should be given the wholehearted support of Southern business men, for as the South continues to develop it will need its young people and the very fact that they remain accelerates its growth. No section can prosper if its young people take up a permanent abode elsewhere.

Recently a most significant news item appeared under the date line of Akron, Ohio. It suggests one benefit which has been overlooked, the experience gained by some of those who have returned to the South. It was to the effect that the Goodyear Tire and Rubber Company had compiled statistics showing the birthplace of its employes. The group studied was a list of 130 employes nominated annually by the 1700 workers at the Akron plant who act as their spokesmen with the company on working conditions. This group of 130 picked men came from 19 different states. It was significant that 47, or more than one-third of the number came from the South.

The survey further indicated that thousands of young men from the South have been employed in the rubber industry, and while a large percentage of them have remained in Akron—as shown by the fact that the average service of the 130 men is nearly 11 years—a number had returned to their homes after a time.

Further evidence was obtained when the Goodyear Company established its huge Southern plant at Gadsden. It was found that among applicants for work at Gadsden were a large number of men who had had one or more years' experience in the rubber industry, thus supplying a nucleus of trained men for starting operations in the South. This plant, after it had been operating a comparatively short time, had made a name for itself in production and in the efficiency developed by its employes. Therefore, in a measure, the men and women who in the past were compelled to seek employment outside of

the South for lack of opportunity at home, are returning to lend their support to the South's manufacturing expansion.

Almost without exception industries locating in the South can find available a type of trained workers around which can be formed a force of efficient employes capable of meeting the most exacting requirements of modern manufacturing methods. No longer can it be said that the South lacks trained workers. The industrial development it has reached and the expansion under way is the answer the South gave to doubters of its advantage as a manufacturing region. Concerns doing a nationwide business have established plants in the South in the last few years. They have created employment for thousands of Southern people. Local capital and leadership have likewise made available employment in many lines. Yet there is room for further development, so that the greatest asset any country possesses-its young men and women may be given the opportunity to work.

Great industrial and other business organizations always go to the colleges of the country for outstanding graduates. They pick and choose the best. We cannot blame those selected for taking advantage of the opportunity offered them, but we do urge that Southern business concerns take cognizance of a growing custom which is likely to adversely affect the South's prospects for future development in the next generation. We cannot stress too strongly that it is important to recognize the value of the highest type of trained personnel in this efficiency age. The youth of today will be the leaders of tomorrow. Let us try to keep most of the best at home, for they will be needed to build upon what the South has achieved thus far.

#### **Public Indebtedness**

THE debt of the Federal Government has been continuously and steadily reduced during the past ten years. During the same period state and local government bonded indebtedness climbed to a point where it represents 68.5 per cent of the entire cost of government in the United States, says the National Industrial Conference Board which has just completed its annual study of the "Cost of Government in the United States." State and local indebtedness has been incurred largely for public works improvements, while participation in the World War raised the debt of the Federal Government.

On June 30, 1930, the gross debt of the Federal Government amounted to \$16,185,000,000, or \$9,297,000,000 less than at the close of the fiscal year ended in 1919. Retirements during the fiscal year 1930 totaled \$746,000,000, as compared with \$673,000,000 in 1929 and \$906,000,000 in the preceding year. The average rate of interest borne by the Federal interest-bearing debt outstanding June 30, 1930, was 3.897 per cent, as compared with 3.946 per cent on June 30,

1929. On the former date the net Federal debt was \$15,985,000,000, or \$129.76 per capita.

In referring to other than Federal debt, the report states that new bond issues do not give a definite indication of changes in the net bonded debt, for each year the bonds retired amount to a considerable portion of the new issues. State and local bonded debt in 1928 amounted to \$12,609,000,000, an increase of 7.6 per cent over 1927. Recent annual increases have averaged approximately \$900,000,000. The per capita net bonded debt, state and local, amounted to \$105.19 in 1928, or an increase of 6.1 per cent over the 1927 figure of \$99.14. New York in 1928 ranked first among the states with a net bonded debt of \$259,000,-000, and North Carolina second with a total of \$162,-000,000. These two states accounted for more than a fourth of the combined net bonded debt of all the states.

#### **State Banking Conditions**

STABILITY in state banking conditions in the South is indicated in facts presented to the Manufacturers Record by department officials of several states. Summarized, these figures reflect a situation that is sounder than at the opening of 1930. "The remaining banks in Mississippi are stronger and better prepared to fully protect the depositors' interests and make the necessary loans for carrying on the business interests of the state," is a statement by J. S. Love, superintendent of banks, that may be applied equally to other Southern States.

There was a decrease in the number of state banks in the South, from 5676 at the end of the fiscal year 1929, to 5319 at the close of the fiscal year 1930. This shrinkage of 6 per cent in number is on a percentage parity with the shrinkage for the entire country. The aggregate state banks resources in the South declined 6.7 per cent, and for the entire country 9 per cent. Paid-in capital for the South decreased 4.8 per cent, as against 6.5 per cent for all the 48 states.

An official report for Arkansas discloses that out of 121 state banks closed in 1930, calendar year, 64 have reopened, and of six closed since January 1 of this year four have resumed operation. Further, R. G. Dickinson, assistant state bank commissioner, writes:

"Conditions have apparently resumed a normal state and very little trouble is expected during the coming year, unless another disaster should come upon us. The compiled bank statement, showing condition of state banks as of March 25, 1931, shows an average cash reserve of nearly 29 per cent, whereas the law requires a reserve of 15 per cent. This average is better than usual for this time of the year."

Of the Arkansas state banks closed in 1930, 38 reopened under the same title and charter and 26 under new title and charter; of those closed in 1931, three reopened under their original charter and one was reorganized under a new charter and name.

Approximately an equal sufferer with Arkansas from drought and depression, Mississippi also reports

evidence of encouraging recuperation. Since November, 1930, 71 state banks, with \$25,800,000 in deposits have been taken over by the state banking department, and since January 1, 1931, 33 have reopened, with deposits of \$10,525,000. Each bank, to reopen, was compelled to meet certain requirements imposed by the state banking department, "and in every instance the bank reopened was in stronger position than it was at the time it closed," Mr. Love comments. Also, he expects that still other banks will reopen in the very near future. He adds:

"In every instance, the capital structure of the bank was strengthened and of the 33 banks that reopened, carrying capital of practically \$1,000,000, this capital was strengthened to the extent of \$500,000, meaning that losses and undesirable assets were required to be taken out and cash and liquid securities substituted therefor."

Mr. Love appears justified in his belief that "this constructive work by the banking department has gone a long way toward reestablishing confidence in banks, and also has had a great deal to do with the improved business condition in Mississippi."

As of March 25, last, Mississippi showed 230 state banks in operation, with total resources of \$130,000,000, deposits of \$105,400,000 and cash reserve over \$27,000,000, more than 26 per cent of the deposits. The cash reserve is 9 per cent greater than a year ago.

In Tennessee, the closing of 20 banks in 1930, one of which has reopened, represents a shrinkage of only 5 per cent in number, as compared with the fiscal year 1929, and is not out of line with the 6 per cent decrease recorded for the entire country.

For North Carolina in 1930, John Mitchell, chief state bank examiner, reports the closing of 83 state banks and the reopening of 32.

#### A Progressive City

OKLAHOMA CITY, that young giant of the Southwest, makes an interesting bid this week for public attention. Elsewhere in this issue, in a striking advertisement the border of which is used as a setting for pictures of skyscrapers that would do credit to New York, this modern city gives facts and figures of growth typical of American progress and development.

It is one of seven American cities of over 100,000 that doubled in population in the last ten years. While forty-third among the cities in population, it was seventh in the nation in building permits in the first quarter of 1931. Twenty million dollars in actual construction is now going on. The city has a profitable market surrounding it and the timeliness of the effort now being made to attract manufacturers and distributors should bear fruit.

A study of what Oklahoma City offers and what is reflected in its work and its optimism is distinctly refreshing.

## Industrial Plant Location

INIMUM cost for production and distribution of a product is the basic factor for consideration in the location of an industrial plant, said President Herbert C. Ryding of the Tennessee Coal, Iron & Railroad Company at the spring meeting of the American Society of Mechanical Engineers in Birmingham. Mr. Ryding spoke from personal experience in picking locations for large industrial plants.

An industrial plant, as defined by Mr. Ryding, is "a collective unit comprising buildings, equipment and power, where materials can be changed into other forms." Industry he separated into three divisions: Agriculture, mines and fisheries; manufacture; transportation. Transportation is ubiquitous, he explained; mines are located at mineral sites; fisheries cleave to the coasts, but manufacture "is free to locate at the most advantageous site."

Of two phases to be considered in the selection of an industrial location, the strategic problem was first mentioned, with the tactical problem second. The first is embodied in the question, "What is the best section of a country in which to locate an industrial plant?" and the other in the query, "What is the best site in the selected section, to locate the plant?" Certain requisites, he added, are essential to any specific industry, but the capacity of a plant is a determining factor.

On the theory that the three groups of costs which outweigh all other considerations are (1) cost of transportation, (2) cost of raw material, and (3) cost of labor, Mr. Ryding continued:

"To simplify the discussion, the cost of transportation and the cost of ma-terials are combined under the heading of transportation, the varying cost of materials being put in terms of relative distances from point of plant location rather than being considered in differ-ences in actual material cost. This combination leaves the two major considerations: (1) Cost of transportation, and (2) cost of labor.

"Other things being equal, the most economical location will be that point between raw material and market which will allow the lowest transportation cost. The transportation coefficient of raw materials and of finished products is determined by the weights and the distances to be carried.

"Then the factor of labor is introduced. The favorable centers of labor will attract the plant from the point of lowest transportation cost and, in respect to the

two factors, the ideal location will be that point which will insure the lowest combined cost of transportation and la-

"Another group of considerations is then introduced, composed of factors which eventually arise as a result of the grouping of industry within the regions of low transportation and labor costs. factors such as (a) saving in overhead cost, (b) savings due to proximity of auxiliary industries, (c) savings due to established markets, and (d) those arising out of economical disposition of byproducts and waste materials.

"Finally, the low-transportation and low-labor-cost location (as previously as-certained) is modified and adjusted in degree as this last group of factors exert their influence on the total ultimate cost.

"Thus everything is reduced to a definite value at a specified place and the assigned values are so combined as to determine the location which will afford the cheapest production and distribution of the manufactured product."

#### Imponderables

There are many other considerations, which may be classified as "imponderables," and which cannot be reduced to any mathematical formula, the speaker added.

The volume of business, both existing and prospective, will determine the economic capacity of the industrial plant to be constructed, Mr. Ryding continued, and this will determine the capital outlay involved, the volume of raw material and quantity of the product, acreage of land required, and class and number of employes. When the capacity of the plant is settled, construction material and operating material must be considered, although "construction labor and equipment deserve most careful consideration."

On general industrial lines, it was suggested that power and fuel are found everywhere, though many industries are drawn to particular types of power. Water in large volume is required by some industries, climate is a factor to be weighed, but banking facilities today "are generally good everywhere and need be considered only in special instances." Prestige sometimes is involved, such as Limoges for chinaware.

In conclusion, Mr. Ryding cited the following ranking of reasons for all locations for the United States as a whole: P. Lipscomb Co., Washington, Plans tation; (4) raw materials; (5) available Pa., call for a 21/2-story structure, 59 factory building; (6) personal reasons; by 103 feet.

(7) power and fuel; (8) cheap rent; (9) near-related industries; (10) living, and climatic conditions; (11) financial aid; (12) taxes: (13) cheap land: (14) near parent company; (15) banking facilities.

A factual survey of industrial development in the United States and Canada, made by the National Electric Light Association and the Metropolitan Life Insurance Co., and covering the experience of more than 16,000 firms, was described by Mr. Ryding as a striking confirmation of the principles laid down as determining industrial-plant location.

#### \$1,000,000 Paper Mill Addition

Fredericksburg, Va.—Three new buildings will be erected by the Sylvania Industrial Corporation, New York, for a \$1,000,000 addition to its plant here for the manufacture of "Sylphrap," a transparent cellulose paper. Drawings and specifications for the buildings have been prepared by The Ballinger Company, architects and engineers, Philadelphia and New York, and construction bids will be opened in their Philadelphia office on May 27.

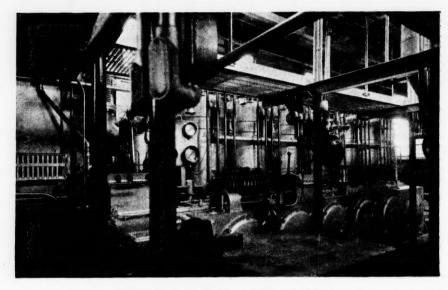
The present plant, erected last year, consists of six manufacturing buildings and a boiler house, on a tract of 204 acres in Rappahannock County, fronting on Tidewater Trail and extending to the Rappahannock River. It has a connection with the Richmond, Fredericksburg and Potomac Railroad. The new buildings will be one and two stories, with brick walls and stone trim, structural steel roof of the saw-tooth type with plank sheathing and tarred felt and slag covering, cork insulation, cement or asphalt floors and rolled steel windows with ventilating sections, Plumbing, heating, electrical and sprinkler equipment will be installed.

#### \$500,000 Washington Residence

Washington, D. C.-General contract to erect a \$500,000 residence here for Raymond T. Baker, Wardman Park Hotel, has been awarded to the William (1) Markets; (2) labor; (3) transpor- by Horace Trumbauer, Philadelphia,

# Handling Bulk Cement

Barges and Towboats of Special Design Constructed for Use the Mississippi River.



Engine Room of Towboat William Dickinson Two 350 horsepower Atlas Imperial Diesel engines power this modern craft. The engines are 6-cylinder, vertical, four cycle, solid injection, direct reversible type.

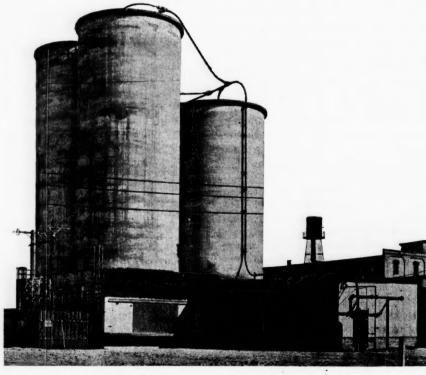
W ITH storage and distributing terminals strategically located on the Mississippi River at Memphis and St. Louis, and with a terminal and manufacturing plant at Camp Girardeau, Mo., the Marquette Cement Manufacturing Co., Chicago, is utilizing inland waterways on an extensive scale as a means of transporting bulk cement, using specially designed barges and towboats.

silos with a total storage capacity of 60,000 barrels, while the St. Louis terminal consists of six silos.

Work is to be started soon on exten-

The Memphis terminal consists of four sive repairs and changes in machinery and equipment at the Cape Girardeau plant, including the rehabilitation of the raw grinding department and the method of handling and drying raw materials for this department; a complete revamping of the clinker grinding department; a new improved system for handling and cooling clinkers; kilns and boilers to augment or replace the old style kilns and boilers now in use; improved power generating units, and a complete overhauling of the plant in general. The Burrell Engineering & Construction Co., Chicago, are designing and construction engineers. Work in the boiler and power departments is under the supervision of Neiler, Rich & Co., engineers of Chicago.

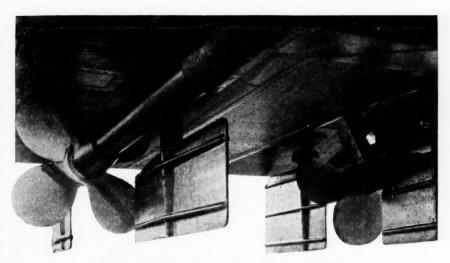
Four especially designed, self-unloading bulk cement barges were built by Riter-Conley Co., Pittsburgh, Pa., from plans by T. R. Tarn, naval architect, also of Pittsburgh. Each barge has a capacity of 5000 barrels; Fuller-Kinyon pumps are provided for discharging cement into storage silos. Barges are of steel with three longitudinal hoppers, each 144 feet long. The dimensions of the barges are 175 by 35 by 7 feet. Cement bins or hoppers extend above the main deck four feet and are covered with light plating made weathertight by welding. Each hopper is served by a screw conveyor into which the cement flows by gravity through manually operated control gates. At a point amidship the



Memphis Cement Storage Silos and Handling Plant

longitudinal conveyors discharge into a thwartship conveyor which in turn discharges into the hopper of a cement pump. The action of the pumps in discharging the cement into silos consists of aerating the cement by discharging the pulverized cement by means of an electrically operated screw which feeds the powder into the air mixing lines for discharge ashore and the blowing out of the lines when the equipment is shut down. Air and electric current for the operation is received from ashore.

The towboat William Dickinson was recently completed and delivered by the Marietta Manufacturing Co., Point Pleasant, W. Va. from plans by T. R. Tarn. Dimensions are: Length on deck. 124 feet; beam molded, 26 feet; depth molded, seven feet; crown of deck, six inches; mean shaft, service condition, five feet. The hull is of the open tunnel type, constructed of mild ship steel material, having modified scow bow and square transom stern, and is framed transversely with rounded bilges. The deck is faired forward and aft and terminates in rounded corners at transoms.



A "Fish's-Eye" View of Propellers and Rudders

There are two four-blade, 6-foot propellers of semi-steel. The rudders are of cast iron

the port rudders independently of each other to conform to the direction of rotation of each associated propeller. Steering is done with lever controls synchronized with the helm angles, instead of the usual wheel for manual operation of the

350 horsepower each at 225 revolutions. Engines are operated and controlled by a single lever hydro-pneumatic control. Electrical generating equipment consists of two three-cylinder Model U, 41/2 by six inches, direct driven, 121/2-kilowatt generator-compressor sets, self-contained on common bed-plate. Deck house and pilot house are of steel, attractively finished, and with every provision for the comfort of the crew. The vessel is equipped with a water filtration and treating system, heating system, refrigerating system, intercommunicating telephone system and radio receiving apparatus.

Material and equipment for the towboat was furnished by the following firms:

Thrust Bearings — Kingsbury Machine Works, Philadelphia, Pa.

Insulation-Celotex Co., Chicago, Ill.

Propellers-F. Ferguson & Son, Hoboken, New Jersey

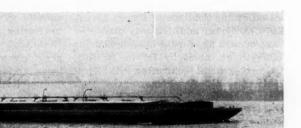
Air Compressors—Ingersoll-Rand Co., New York City

Searchlights—Carlisle & Finch Co., Cincin-nati, Ohio

Push Button Controls—General Electric Co., Schenectady, N. Y.

Telephone System—S. H. Couch Co., Nor-folk Downs, Mass.

Radio Receiving Apparatus—C. R. Leutz, Inc., Altoona, Pa.
Steering Gear Pressure Pumps and Fire and Bilge Pump—Goulds Pumps, Inc., Seneca Falls, N. Y. Silent Chains-Morse Chain Co., Ithaca, New York



St. Louis, Mo., Storage and Distributing Terminal

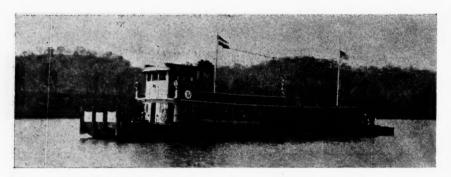
The underwater portion of the stern is rudders. Propellers are four-bladed, arranged to facilitate easy entrance of water to the propellers and also for easy discharge therefrom. Tunnels are flat topped and straight sided, more definitely to direct and deliver a solid column of water to the propellers. The steering and handling system provides for operating the starboard rudders or

solid wheels, of semi-steel. Rudders are of cast iron, secured to the rudder stocks by flanged heads. Two extra rudders are provided as spare gear.

Propelling machinery consists of two Atlas-Imperial six-cylinder, vertical, four cycle, solid injection, directly reversible full Diesel engines, capable of developing



Towboat and Barges Ready for a Trip on "Ole Man River"



The Towboat William Dickinson Is Diesel Powered

Fuel Oil Transfer and Lubricating Oil Pumps—Viking Pump Co., Cedar Falls, Iowa

Fuel and Lubricating Oil Purifiers—De Laval Separator Co., New York City
Raw Water and Filtered Water Service
Pumps, Radiator Valves, Air and Water
Valves—Crane Co., Chicago, Ill.

Water Filtration System — Hygeia Filter Co., Detroit, Mich.

Chlorination System — Wallace Tiernan Products, Inc., Belleville, N. J.

Water Meters-Neptune Meter Co., New York City

Fuel Oil Burn Chicago, Ill. -Automatic Burner Corp., Steam Heating and Plumbing Fixtures— American Radiator & Standard Sanitary Manufacturing Co., New York Radiator Outfit Traps—Warren Webster & Co., Camden, N. J.

ile—Pittsburgh Porcelain Tile Co., Pitts-burgh, Pa. Refrigerating Apparatus—Seeger Refrigerator Co., St. Paul, Minn.

Water Refrigerator Unit-Frigidaire Corp., Dayton, Ohio

Galley Range-Ingle Mfg. Co., San Diego, Calif.

Air Siren-Nils F. Nord, New York City

Engine Telegraphs—Chas. Cory & Sons, Inc., New York City

Bells and Ventilators-W. & J. Tiebout, New York City Yawl-Racine Boat Corp., Racine, Wis.

Fans-Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

Berths-Rome Co., Inc., Chicago, Ill.

Floor Covering and Lockers — Marshall Field Co., Chicago, Ill. Engine Indicator—Bacharach Industrial Instrument Co., Pittsburgh, Pa.

Speed and Temperature Instruments—Fox-boro Co., Foxboro, Mass.

Ship Clocks and Barometers - Waterbury Clock Co., Waterbury, Conn.

#### **Expanding Grain Storage Facilities**

New Elevators and Additions Under Way in Texas, Oklahoma and Missouri

N increase of from 12,000,000 to A 14,000,000 bushels in the storage facilities at fourteen of the country's large grain markets is expected within the next few months. At present the rated capacity of these facilities is 343,-595,000 bushels as compared with 301.-859.000 bushel capacity on July 1, 1930. Important new construction projects have been completed or are under way in Minneapolis, Duluth, Milwaukee and Omaha, and indications are that 6.000 .-000 to 10,000,000 bushels capacity will be added to elevators in the Kansas City district before the 1931 grain crop moves. New elevators and additions to established elevators are being built in Texas and Oklahoma.

A 2,500,000-bushel grain elevator is being constructed at Kansas City by the Missouri Pacific R. R. Co., at an estimated cost of \$1,800,000, bringing the railroad's grain facilities at Kansas City to 6,080,000 bushels. The plant will be leased by the Continental Export Co. A 2.076,000-bushel addition was completed some months ago for the Missouri Pacific Lines in St. Louis by Edwin Ahlskog, Chicago, general contractor. In April contract was awarded The John S. Metcalf Co., Chicago, to build a 4,000,000bushel addition to the Atchison, Topeka & Santa Fe Ry. Co. grain elevator in the Argentine district of Kansas City. It is estimated that since the first of the year contracts let for grain storage space in the Kansas City district provided for a total of more than 6,000,000 bushels.

As indicative of the program under way in various parts of the country for increasing grain storage facilities, brief facts are presented herewith covering announcements of the character reported in the MANUFACTURERS RECORD during the past four weeks. Included in recent announcements are the following: The Blackwell Mill & Elevator Co., Blackwell. Texas, awarded contract to the Burrell Engineering & Construction Co., Chicago, for a 500,000-bushel elevator. The Enid Terminal Elevator Co., Enid, Okla., let contract to the Jones-Hettelsater Co., Kansas City, for a 1,000,000bushel addition. At Kansas City, Mo., the Wabash Railroad Co. let contract to the Burrell Engineering & Construction Co., Chicago, for a 1,000,000-bushel addition. The Chicago, Rock Island & Pacific Ry. Co. awarded contract to James Stewart Corp., Chicago, for an elevator at Kansas City, Mo. The Ralston Purina Co., St. Louis, selected Jones-Hettelsater Construction Co. to erect a grain elevator. Riffe Bros. Co., Texhoma, Okla., let contract to Chalmers & Borton, Kansas City, for a 250,000-bushel elevator. At Shawnee, Okla., the Shawnee Milling Company let contract to Jones-Hettelsater Construction Co. for a 300,000-bushel addition.

The Galveston Wharf Company, Galveston, Texas, last week dedicated a

\$3,000,000 six million bushel grain elevator, said to be the largest port elevator in America. Jones-Hettelsater Construction Co. handled the general contract after plans by Horner & Wyatt, Kansas City.

In March the Burrus Panhandle Elevators, Dallas, awarded a contract to J. S. McKnight, Amarillo, Texas, for a 1.000.000-bushel elevator at Amarillo. The Kimbell Milling Co., Fort Worth, in April awarded a contract to Jones-Hettelsater Construction Co. for a 700,000bushel elevator addition. Last month the Missouri-Kansas-Texas R. R. Co. let contract to the James Stewart Corporation for a 1,054,000-bushel addition to its Kansas City elevator.

The Ponca City (Okla.) Milling Co. last month awarded contract to the Jones-Hettelsater Construction Co. for a 328,000-bushel elevator. In February the Oklahoma Wheat Pool Elevator Corp. awarded a contract for a 1,000,000-bushel elevator at Enid, to Jones-Hettelsater Construction Co.

Stocks of grain in storage at the principal markets have increased recently. For instance, at Galveston, Houston and New Orleans on May 1 stocks amounted to 10,034,000 bushels as compared with 2,481,000 bushels a year ago. Unfilled space amounting to about 8,000,000 bushels at Galveston and Houston was about the same as on May 1, 1930. But at New Orleans the elevators were practically filled on May 1, whereas a year ago there was unfilled space totalling about 4,000,000 bushels. Fort Worth on May 1 had less than 3.000.000 bushels of unfilled space, whereas on the corresponding date last year storage for about 5.500.000 bushels was available.

# A Look at the Building Industry

FIRESIDE for every family is a A worthy objective for Americans," said A. P. Greensfelder of St. Louis, President of the Associated General Contractors of America, in a statement stressing the need for good building design. Mr. Greensfelder heartily commended efforts being put forth by leading architects and contractors as represented by the American Institute of Architects and the Associated General Contractors of America to rid the building industry of evils which have hindered its progress and thereby to revivify homebuilding throughout the nation.

"We must coax capital back into the construction field," declared Mr. Greensfelder. "Good design, like good construction, insures the investment. Perhaps the architects and contractors themselves may presently decide to join together in financing construction. If we think it is good for other organizations, it may be equally advantageous for us."

"It is a long stride from the first log hut in America to the modern apartment of today, but beauty and comfort are no longer considered luxuries." he said. "Our residences, whether single or multifamily, should be as beautiful and harmonious as the architects of America can produce. It is the architect's function to inject beauty into the structure.

"No one prefers to construct an ugly building when a beautiful one can just as well be erected. Contractors have pride in craftsmanship as architects have pride in creation. Both have a common purpose—the beautiful and practical upbuilding of America. In this the opportunities of both are unlimited.

"We Americans rebuild our large cities about every third of a century. Producers are constantly creating new materials or new styles of old materials to keep us all busy modernizing old homes and offices or building new ones. Some day American business men will follow the guidance of architects and make their business homes as comfortable and admirable as wives do their residences, where men spend only half as much waking time."

#### Urges Year-Round Building

All states should issue bonds for public buildings, just as they do for highA Nationally known contractor comments on the present situation.

ways, Mr. Greensfelder asserted, "Nearly every state," he added, "needs additional public buildings to adequately house its universities and eleemosynary institutions. Jointly the architects and contractors of the nation can do much toward educating our citizens and politicians with respect to public policy. We are not advocates of more government in business. but of more business in government. We believe the government should employ architects to design buildings and contractors to construct them. Uninterrupted construction throughout the year should also be our common goal, since we have found that it is 'custom not climate' which is mainly responsible for seasonal idleness in the building industry."

# Changing Working Conditions Increase Demands for Structures of All Types

"In cubage or area there is a constantly increasing demand for construction per capita in America," says Mr. Greensfelder. This has been brought about largely, he feels, through the changing working conditions; for, whereas a workman 25 years ago in the average city spent "ten or twelve hours in an ugly factory, with the saloon as his only place of recreation," today that same workman, living in a home complete with electric lights, gas range, modern heating and plumbing facilities, drives in his automobile to a modern daylight factory, where he works 7 or 8 hours, taking time off to go out to lunch. Thus, with the increasing time for leisure coupled with the fact that power machinery takes drudgery out of many tasks, there is also an enormous increasing demand for recreation facilities, Mr. Greensfelder points out; for it

is possible for the average workman to spend his evenings in the moving picture theatre, the dance hall, the city auditorium, or the local library, and his children may find diversion at an indoor skating rink, or a boxing match at the arena. Moreover, the family may spend a week-end at a cabin along the river, or at a hotel in the hills. Besides, conditions have so changed that housewives no longer are forced to work from daylight until dark at household tasks. More and more they patronize the dairy, the delicatessen and the modern laundry, with their up-to-date plants for big scale, low cost production. Canneries and cold storage plants are springing up all over America, Mr. Greensfelder declares. With all this he feels that "we are more thrifty than ever before, as our banking institutions indicate. We know rainy days are coming, and more of us than ever before provide accordingly."

Because of the ever-increasing field of structural opportunity, there is a need to harmonize the interests of architects and contractors, says Mr. Greensfelder.

"Unrestrained competition in the building industry is an evil. However, practical remedies are gradually becoming effective through local credit bureaus and through the National Bureau of Contract Information," Mr. Greensfelder concluded. "Competition has been called the life of trade, but it is the death of many traders. Fair and bonafide competition is fundamental in the construction industry. Any restrictive act is a breach of faith of our Association, its ethics and principles. Competition can only serve its legitimate purpose, however, when it operates under conditions fair alike to owner, designer, and constructor."

#### \$500,000 Nashville School

Nashville, Tenn.—The Gillespie property of about 15 acres on the Gallatin road has been acquired by the Nashville Board of Education as the site of a new senior high school, according to Albert E. Hill, president of the board, and it is understood an architect will soon be commissioned to prepare plans for the structure, estimated to cost \$500,000. A stadium to seat 10.000 will be constructed in the rear of the building.

# Mechanization of Bituminous Coal Mines

ROM 37,862,000 tons in 1929 the production of bituminous coal by "mechanized mining" increased to a total of 46,824,000 tons in 1930. This is a gain in one year of 8.962,000 tons, or 23.7 per cent, states the Bureau of Mines. The increase is the more remarkable because it occurred in a time of acute business depression when the national demand for bituminous declined 13 per cent and when production by hand loading fell off 17 per cent. A better indicator of the growth of mechanization is the proportion mined mechanically which increased from 7.1 per cent in 1929 to 10.5 per cent in 1930. Measured by this standard, the degree of mechanization in 1930 was nearly half again as great as in the preceding year.

These figures refer only to mechanical devices designed to reduce the labor of hand shoveling into mine cars, although in a larger sense the introduction of any machine, such as the cutting machine or the haulage locomotive, is a form of mechanization. The figures are a preliminary summary of a study by F. G. Tryon and L. Mann which will later be published in detail, it is announced. "No pains have been spared to insure completeness, but the Bureau will appreciate advice as to omissions if any are noted. The statistics are based on replies to a question on the report card sent to all operators, inquiring whether loading machines were used in 1930. Every operator courteously reported the number and types of machines and the tonnage handled by each type." To make sure that every mine using mechanical loading was included, manufacturers of equipment were asked for lists of the mining companies to whom they had sold machines.

The 46.824,000 tons of bituminous coal produced by mechanized mining in 1930 relates only to operations underground. It does not include coal loaded by power shovels in strip pits, which amounted to approximately 20,000,000 tons in 1930. Neither does it include anthracite, 4,-

TOTAL TONNAGE MECHANICALLY MINED 1929-1930, BY STATES

			Incre	ease-
States	1929	1930	Net tons	Per cent
Illinois	18,252,000	22,803,000	4,551,000	24.9
Indiana		3,503,000	229,000	7.0
Pennsylvania	4.234,000	7,035,000	2,801,000	66.2
Wyoming	3,002,000	2,865,000	137,000	*4.6
Utah		862,000	*58,000	*6.3
Montana		1,115,000	407,000	57.5
Kentucky	812,000	989.000	177,000	21.8
West Virginia	2,698,000 } 984,000 {	3,079,000	*603,000	*16.4
Alabama	934,000	2,060,000	1.126,000	120.6
Other States†	2,044,000	2,513,000	469,000	22.9
	37,862,000	46,824,000	8,962,000	23.7

\*Decrease. †Ohio, Washington, Arkansas, Colorado, Missouri, Oklahoma, Tennessee, Maryland, New Mexico, North Carolina and Iowa.

253,000 net tons of which were mined mechanically in 1930.

It is also important to note that the figures represent production and not capacity. Because of the depression, many mines were working short time, and a considerable number of the machines used in 1930 were installed late in the year and so had little effect on production for 1930.

Of the total tonnage handled mechanically, 42.9 per cent was loaded by mobile loading machines, 3.5 per cent by scraper loaders, 40.7 per cent by pit-car loaders, and 12.9 per cent by conveyors, including duckbills.

In comparison with 1929, the total mechanized tonnage increased 23.7 per cent. All types of machines contributed to this increase. The tonnage handled by mobile loading machines increased 22.2 per cent. Scrapers, which had barely held their own in the three years previous, increased slightly, while duckbills, including other types of self-loading conveyors showed a gain of 13.6 per cent.

Somewhat larger increases were recorded by the devices involving hand shoveling. The increase in pit-car loaders during the period when this device was invading the Illinois field could hardly be maintained, but for the country as a whole pit-car loaders showed a growth of 27.3 per cent in 1930. The tonnage handled by means of handloaded face conveyors increased 26.5 per cent.

Because of the business depression, the tonnage mined mechanically decreased in certain States, but in the majority there was a large increase. The fastest percentage growth was recorded in Alabama where a number of new installations, especially of pit-car loaders, caused a gain of more than 120 per cent over the year preceding. Next in point of increase came Pennsylvania with a gain of 66.2 per cent, followed by Montana with 57.5, Illinois with 24.9, Kentucky with 21.8, and "all other States" with 22.9 per cent. The small decreases in Wyoming, Utah and the Virginias were chiefly due to the decline in total production, for in many districts in these States the per cent of the output attained by mechanized mining was higher than ever before.

#### Kentucky Produces 41 Per Cent

#### of Country's Fluorspar

Kentucky in 1930 shipped 39,181 tons of fluorspar valued at \$763,370, or over 41 per cent of the country's tonnage, valued at \$1,746,643. As a result of the slowing up in industries where this mineral is used, the domestic fluorspar producers' volume was the smallest since 1921, or 95,849 short tons. There was a decrease in fluorspar shipments to each of the consuming industries, except the cement industry.

Thirty-five mines or prospects were worked in Kentucky during 1930. Shipments from these operations were a decrease of 45 per cent from the 70,827-ton figure for 1929 and were divided by tonnages among consuming industries as follows: Steel, 27,321; hydrofluoric acid, 7116; glass, 1843; cement, 954; enamel, 923; foundry, 587; miscellaneous, 225, and export, 212.

#### TONNAGE HANDLED BY PRINCIPAL TYPES OF MACHINES, 1929, 1930

	1929	1930	Incre	ease-
	Net tons	Net tons	Net tons	Per cent
Mobile loading machines Scraper loaders	$\substack{16,432,000\\1,550,000\\1,309,000}$	20 078,000 1,648,000 1,487,000	3,646,000 98,000 178,000	22.2 6.3 13.6
Total loaded by machines	19,291,000	23,213,000	3,922,000	20.3
Pit-car loaders Other hand-loaded conveyors		19,066,000 4,545,000	4,087,000 953,000	27.3 26.5
Grand total	37,862,000	46,824,000	8,962,000	23.7

# \$6,600,000 Irrigation Project

# Under Way

in

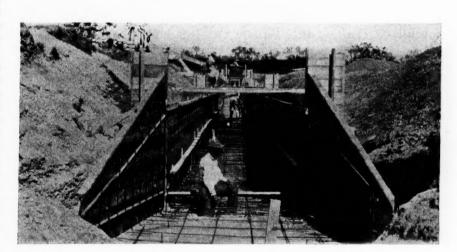
## Texas

NONSTRUCTION work is being carried forward at a rapid rate on the \$6,600,000 power and irrigation project of the Maverick County Water Control and Improvement District No. 1, at Eagle Pass, Tex., which will take water from the Rio Grande in Kinney County, at a point 45 miles northwest of Eagle Pass. The project is being handled in three units: Unit 1, the main canal from the intake to the power plant; Unit 2, remainder of the main canal system; and Unit 3, the district distribution system. Unit 1 is more than 50 per cent complete, with completion planned for November 1, next, and contracts are soon to be closed for units 2 and 3. Preliminary investigations to determine the feasibility of the project were made in 1926 and contract for the first unit was let on March 3, 1930.

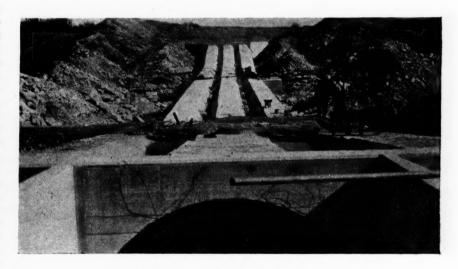
Water will be diverted from the river without dam or pumping. The diversion is made at the head of a rock outcropping in the bed of the stream over which the river flows for about 20 miles, the stream bed having a fall of 4 to 41/2 feet per mile. The first half-mile of the canal lies under and along the left bank of the river, the canal cross-section being cut in solid rock and lined with gunite, producing a smooth surface. At a point half a mile from the intake the canal leaves the river by means of a tunnel composed of three barrels, each 16 feet in width and carrying 10 feet in depth of water. At the entrance to these tunnels are Broome self-closing gates, each weighing 20 tons. Five miles to the south the canal and river again parallel each other, the canal continuing along the river bank for about nine miles where the first tract of tributary land, containing 16,000 acres, is reached. Extending down the river for 90 miles,



Section of Main Canal



Culvert to Carry Storm Water Under Canal



Showing Progress of Construction on the Siphon

some 60,000 acres will be covered by gravity water. About 32 miles below the intake the canal again returns to the bank of the Rio Grande; at this point 87 feet in elevation has been gained on the river. Here a 12,000-horsepower plant will be located. The district will sell the water to the Central Power & Light Co., San Antonio, an Insull interest, the company to develop the power and distribute to the Winter Garden District immediately tributary, the district receiving a return of \$250,000 per annum.

Canal structures are of reinforced concrete. In its course to the river, water is carried by inverted syphons under the

natural streams. Syphons consist of three circular barrels, each 101/2 feet inside diameter, and each barrel having a carrying capacity of 252,000 gallons per minute. The system includes 60,000 acres of gravity land, and 25,000 acres to be served by low lift, 20-foot pumping. The crop producing season on the Rio Grande extends throughout the year, and products include any vegetation that will grow in a sub-tropical climate.

Ulen & Co., Lebanon, Ind., is general contractor, and the work has been distributed to Trinityfarm Construction Co., Dallas, for excavation; Bart Moore, Inc., San Antonio, concrete construction: Barker Bros., rock work; Field & McCelvy, culvert construction, and to Gunite Concrete & Construction Co., Kansas City, for canal lining. William L. Rockwell, Eagle Pass, is supervising engineer for the district.

#### Bids on Barrack Buildings

Fort Benning, Ga.-Capt. W. M. Allison, Constructing Quartermaster here, opens bids May 28 for the construction of barracks No. 2 or units E. F. G and H. The buildings will be 3 stories high.

### New Bolt and Nut Plant at Birmingham

N a site of approximately ten acres in the northeast industrial section of Birmingham, Ala., the Lamson & Sessions Bolt Co., Cleveland, Ohio, has built one of the country's most modern bolt and nut plants. The main buildings, comprising office building, manufacturing department, shipping department and storage space for raw material and finished product, are 260 feet by 240 feet, and have about 65,000 square feet of floor space. Construction is of brick, steel and concrete. Floors are concrete with laid over-floor or tread of six-inch wooden blocks, the grain being perpendicular to the floor, designed to provide a resilient and comfortable standing surface for employes, and also

All machinery is of the latest type and is electrically driven. So far as is possible all machinery is automatic. A fully equipped laboratory is provided for test-

ing raw material before using and for checking and analyzing the various steps up to and including the finished product. Where heat is required in such places as the forging room, heat treating department, etc., gas is used for fuel. Rest rooms and showers are provided for 150 employes.

The entire supply of steel, made especially for Lamson bolts, is secured in the Birmingham district. The plant will produce and carry in stock a complete line of hot and cold made bolts and nuts of all kinds, such as carriage, machine, lag, plow, tire, stove, elevator bolts, etc., and hot and cold square and hexagon nuts, semi-finished nuts, cotters, wire rope clips and pipe plugs. The range of sizes is said to be complete.

The Johnson Construction Co., Birmingham, acted as general contractor for all units, and the George S. Rider Co., Cleveland, Ohio, were the engineers.

Sub-contracts were awarded to the following firms, all of Birmingham except as otherwise designated:

Plumbing and Sewerage — Cummings Plumbing & Heating Co. Wiring-Dixie Electric Construction Co. Roofing-Young & Vann Supply Co.

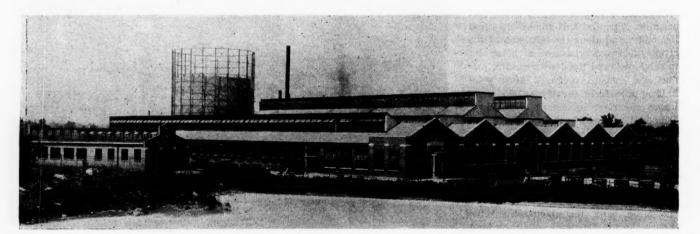
Painting-Long Decorating Co.

Steel Erection-Buchanan Construction Co. Ornamental Iron-Birmingham Ornamental Iron Co. Brick-Stephenson Brick Co.

Slag-Woodstock Slag Corp. Stone-Reed Bros. Stone Co.

Stone—Reed Bros. Stone Co.
Coment—Lehigh Portland Cement Co.
Glass and Glazing—Pittsburgh Plate Glass
Co. and Moore-Handley Hardware Co.
Metal Windows—Detroit Steel Products Co.
Gas-fired Furnace Equipment and Automatic Temperature Controls—F. J. Evans
Engineering Co.
Heating—Grinnell Co., Inc., Providence,
Rhode Island
Structural Steel—Virginia Bridge & Iron
Co., Roanoke, Va.
Reinforcing Steel—Concrete Steel Co., New
York

York
Sand and Gravel—Alabama Sand & Gravel
Co., Montgomery, Ala.
Millwork—Enochs Lumber & Mfg. Co.,
Jackson, Miss.
Wood Block Floors—Republic Creosoting
Co., Mobile, Ala.



Recently Completed Birmingham Plant of Lamson and Sessions Bolt Company

## Wholesale Distribution Census

M UCH interest has been aroused in distribution census reports covering the wholesale trade of cities of 100,000 population or more. These reports are part of the Distribution Census taken for the first time in 1930 by the Bureau of Census, Department of Commerce.

Beginning April 30 the Manufacturers Record published preliminary reports available up to that time on several Southern cities. Additional preliminary figures on the wholesale trade of other Southern cities have been issued since then and are summarized in this article. The report on each city listed includes, in addition to wholesalers proper, a large number of establishments in the wholesale field, such as manufacturers' sales branches and bulk tank stations in the petroleum industry operating somewhat like wholesalers, also brokers and selling agents.

It is important to bear in mind that these reports cover the wholesale business transacted during the year 1929 and the figures shown are preliminary and subject to revision. Attention is also invited to the fact that the wholesale trade reported does not include sales made by manufacturers direct from plant locations, nor does it include wholesale sales made by retailers, although some retail business is included in the total volume of wholesale trade reported by these establishments. Classification of the types of business is based on the major function of each concern reporting.

#### Wholesale Trade in New Orleans, La.

The volume of business done by the 396 wholesalers proper located in the city of New Orleans during the year 1929 amounted to \$323,402,659. These wholesalers employed 6361 men and women, paid them \$12,157,856 in salaries and wages, and carried a stock at the end of the year whose cost value amounted to \$28,025,865. The 1930 population of New Orleans is 458,762.

The total volume of business transacted by all establishments in the wholesale field in New Orleans in 1929 amounted to \$590,611,561. This volume of business was reported by 638 establishments which employed 9509 men and women, paid them \$18,344,268 in salaries

NEW ORLEANS WHOLESALE ESTABLISHMENTS, BY KIND OF BUSINESS

Kind of business	Number of establish- ments	Number of em- ployes	Net sales (1929)	Salaries and Wages (total)	Stocks on hand end of year (at cost)
Automotive group, total Chemicals, drugs and allied prod		469	\$10,343,659	\$868,111	\$1,267,047
ucts, total	. 29	664	14,817,072	1.100.079	1.738 245
Dry goods and apparel, total	. 49	746	26,356,922	1,487,039	3,471,675
Food and tobacco products, tota		2,644	214,699,164	4,562,207	9,291,925
Furniture and house furnishings				,	-,,
total	. 17	163	3,316,807	272.402	349,984
Hardware, electrical, plumbin	g				
and sporting goods, total	. 66	1.119	25,898,126	1,836,924	2.648,681
Lumber and building material	S	,		-,,	2.010,001
(other than metal), total	. 49	555	31,525,623	1.210.683	1,389,304
Machinery, equipment and sup			0-,0-0,0-0	1,110,000	1,000,001
plies (except electrical), total,		889	17,251,687	2,604,160	2.813.842
Metals and minerals (except juni		000	21,202,001	2,001,100	2,010,012
and scrap), total	. 39	714	43,930,076	1.206.412	1.009.604
Other groups, total	. 68	1,095	43.515,964	2,126,803	3,936,901
g, www.					0,000,001
Total	. 638	9,509	\$590,611,561	\$18,344,268	\$37,333,418

and wages, and carried stocks whose cost value at the end of 1929 amounted to \$37.333.418.

Of the total 638 establishments of all types covered, 396 are classified as wholesalers, 132 as manufacturers' sales branches, 42 as manufacturers' agents, 35 as brokers, 17 as selling agents, 5 as bulk tank stations, 4 as export agents, 2 as district sales offices, 2 as chain store warehouses, 2 as purchasing agents, and 1 as a general sales office.

Of the 396 classified as wholesalers, 323 are wholesale merchants, 30 are export merchants, 23 are commission merchants, 14 are importers, 5 are drop shippers, and 1 is a converter.

### Wholesale Trade in San Antonio, Tex.

The volume of business done by the 214 wholesalers proper located in the city of San Antonio during the year 1929 amounted to \$77.873.014. These whole-

salers employed 3093 men and women, paid them \$4.835,856 in salaries and wages, and carried a stock at the end of the year whose cost value amounted to \$8,646,999. The 1930 population of San Antonio is 231,542.

The total volume of business transacted by all establishments in the wholesale field in San Antonio in 1929 amounted to \$124,028,035. This volume of business was reported by 301 establishments which employed 4385 men and women, paying them \$6,891,824.

Of the total 301 establishments of all types covered by this report, 214 are classified as wholesalers, 36 as manufacturers' sales branches, 22 as brokers, 11 as manufacturers' agents, 6 as bulk tank stations, 6 as chain store warehouses, 5 as selling agents, and 1 as a district sales office.

Of the 214 classified as wholesalers, 203 are wholesale merchants, 9 are commission merchants, 1 is a cash and carry wholesaler, and 1 is a wagon distributor.

SAN ANTONIO WHOLESALE DISTRIBUTORS-ALL, KINDS OF BUSINESS

	Number of	Number of			Stocks on hand end
	establish-		Net sales	Salaries and	of year
Kind of business	ments	ployes	(1929)	Wages (total)	(at cost)
Automotive group, total	. 29	460	\$12,441,543	\$888.271	\$1.696.871
Chemicals, drugs and allied prod	-		, ,	,	4-100-010-1-
ucts, total	. 14	254	4,899,845	415,281	836.597
Dry goods and apparel, total	13	421	7,726,547	695,838	1,159,562
Farm products (except dairy and					
poultry products), total		75	10,832,258	133,101	111,162
Food and tobacco products, total		1,251	51.417,064	1,815,328	2,931,891
Furniture and house furnishings					
total	. 6	43	1,596,522	85,898	210,039
Hardware, electrical, plumbing					
and sporting goods, total		545	10,245,039	807,587	1.859,110
Lumber and building material					
(other than metal), total		148	5,582,359	259,440	436,776
Machinery, equipment and sup		004	0.000 = 10	244.222	
plies (except electrical). total.		394	6,636,549	644,869	1,654,952
Metals and minerals (except iron					
and steel scrap and other wast		0.40	= 400 044	<b>200 100</b>	
material), total		343	7,160 241	569,498	304,260
Other groups, total	. 34	451	5,490,068	576,713	694,128
Total	. 301	4,385	\$124,028,035	\$6,891,824	\$11.895 348

#### Wholesale Trade in Oklahoma City, Okla.

The volume of business done by the 276 wholesalers proper located in the city of Oklahoma City during the year 1929 amounted to \$119,913,075. These wholesalers employed 3524 men and women, paid them \$5,734,495 in salaries 194 wholesalers proper located in the

246 are wholesale merchants, 20 are commission merchants, 5 are drop shippers, 3 are wagon distributors, and 2 are export merchants.

#### Wholesale Trade in Norfolk, Va.

The volume of business done by the

\$4,660,680. The 1930 population of Norfolk is 129,710.

The total volume of business transacted by all establishments in the wholesale field in Norfolk during 1929 amounted to \$138,305,638. This volume of business was reported by 292 establishments which employed 3079 men and women, paid them \$5,324,096 in salaries and wages, and carried stocks whose cost value at the end of 1929 amounted to \$6,480,982.

Of the total 292 wholesale establishments of all types covered by this report, 194 are classified as wholesalers, 41 as brokers, 22 as manufacturers' sales branches, 13 as manufacturers' agents, 8 as selling agents, 6 as bulk tank stations, 4 as factors, 3 as chain-store warehouses, and 1 as an auction company.

Of the 194 classified as wholesalers, 148 are wholesale merchants, 36 are commission merchants, 9 are export merchants, and 1 is a drop shipper.

#### OKLAHOMA CITY WHOLESALE ESTABLISHMENTS. BY KIND OF BUSINESS

	Number of establish-	Number of em-	Net sales	Salaries and	Stocks on hand end of year
Kind of business	ments	ployes	(1929)	Wages (total)	(at cost)
Automotive group, total		542	\$20,245,100	\$1,089,563	\$2,030,590
Chemicals, drugs and allied products, total		179	4,700.900	372,937	208,309
Dry goods and apparel, total		132	3,721,823	225,853	604,837
Farm products, except dairy and					
poultry products, total	. 44	263	85,680,325	472,622	761.667
Food and tobacco products, tota	1 112	1,401	67,448,473	2,064,035	2,043,288
Furniture and house furnishings					
total	. 10	209	4,253,081	539,389	774,770
Hardware, electrical, plumbing	g				
and sporting goods, total	. 47	907	29,028,011	1,781,520	3,099,745
Lumber and building materials					
other than metal, total		501	10.064,729	829,226	743.840
Machinery, equipment and sup				,	
plies (except electrical), total.		479	19,649,088	862,175	3,666,918
Metals and minerals (except juni		110	20,010,000	002,110	0,000,010
and scrap), total		237	11.565.567	421.148	306,933
		477	12.580,196		1,223,773
Other groups, total	. 01	211	12.550,150	716,552	1,220,110
Total	412	5,327	\$268,937,393	\$9,375,020	\$15,464,770

and wages, and carried a stock at the end of the year whose cost value amounted to \$10,990,994. The 1930 population of Oklahoma City is 185,389.

The total volume of business transacted by all establishments in the wholesale field in Oklahoma City in 1929 amounted to \$268,937,393. This volume of business was reported by 412 establishments which employed 5327 men and women, paid them \$9,375,020 in salaries and wages, and carried stocks whose cost value at the end of 1929 amounted to \$15,464,770.

Of the total 412 establishments of all types covered in this report 276 are classified as wholesalers, 65 as manufacturers' sales branches, 34 as brokers, 16 as manufacturers' agents, 10 as bulk tank stations, 4 as selling agents, 3 as chain-store warehouses, 3 as country buyers of farm products, and 1 as a district sales office.

city of Norfolk during the year 1929 amounted to \$74.127,757. These whole-

#### Wholesale Trade in Nashville, Tenn.

The volume of business done by the salers employed 2216 men and women, 139 wholesalers, proper, located in the

#### NORFOLK WHOLESALE ESTABLISHMENTS, BY KIND OF BUSINESS

Kind of business	Number of establish- ments	Number of em- ployes	Net sales (1929)	Salaries and Wages (total)	hand end of year (at cost)
Automotive group, total	. 4	44	\$1,271,680	\$100,289	\$177,816
Chemicals, drugs and allied products, total	. 4	52 89	1,051,923 1,887,585	118,583 152,998	284,250 252,399
Farm products (except dairy and poultry products), total	. 21	116 1,641	29,260.216 67,400,422	350,953 2,426,444	431,761 2,581,559
Furniture and house furnishings	3	11	257,197	16,860	28 386
Hardware, electrical, plumbing and sporting goods, total Lumber and building materials	. 21	230	6,337,156	504,674	840,360
(other than metal), total		80	5,603,459	176,874	46.658
Machinery, equipment and sup- plies (except electrical), total. Metals and minerals (except iron	18	220	3,304,035	422,379	604,145
and steel scrap and other waste materials), total	22	227 369	7,206,493 14,725,472	404 893 649,149	473,296 760,352
Total	292	3,079	\$138,305,638	\$5,324,096	\$6,480,982

wages, and carried stocks at the end of Of the 276 classified as wholesalers the year whose cost value amounted to

paid them \$3,836,414 in salaries and city of Nashville during the year 1929 amounted to \$74,037,066. These wholesalers employed 2367 men and women, paid them \$4,118,973 in salaries and wages, and carried stocks at the end of the year whose cost value amounted to \$7,463,367. The 1930 population of Nashville is 153,866.

The total volume of business transacted by all establishments in the wholesale field in Nashville during 1929 amounted to \$115,821,202. This volume of business was reported by 212 establishments which employed 2906 men and women, paid them \$5,022,609 in salaries and wages, and carried stocks whose cost value at the end of 1929 amounted to \$8,465,823.

Of the total 212 establishments of all types covered by this report, 139 are

#### NASHVILLE WHOLESALE ESTABLISHMENTS, BY KIND OF BUSINESS

Kind of business	Number of establish- ments	Number of em- ployes	Net sales (1929)	Salaries and Wages (total)	Stocks on hand end of year (at cost)
Automotive group, total		196	\$4,222,311	\$369.748	\$628,482
Chemicals, drugs and allied prod	-	200	\$1,444,011	φυσυ, 120	φ020, <del>2</del> 02
ucts, total	. 8	202	3,440,652	288.145	768,771
Dry goods and apparel, total	. 22	337	10,461,932	835,828	1,059,538
Farm products (except dair;					-,,
and poultry products), total	. 21	142	32,016,532	256,392	326 857
Food and tobacco products, tota	1 70	786	36,260,877	1,231,350	1,713,094
Furniture and house furnishings	,				
total	. 4	27	676,730	46.335	81,970
Hardware, electrical, plumbing	g				
and sporting goods, total	. 12	553	10,572,109	• 902,677	1,997,314
Lumber and building materials	S				
(other than metal), total		117	2,279,332	194,975	326,790
Machinery, equipment and sup					
plies (except electrical), total.	. 16	121	3,322,315	231,421	450,786
Metals and minerals (except juni					
and scrap), total	. 13	122	4,201,841	195.196	125,076
Other groups, total	. 24	303	8,366,571	470,542	987,145
Total	212	2,906	\$115,821,202	\$5,022,609	\$8,465,823

classified as wholesalers, 27 as brokers, 23 as manufacturers' sales branches, 9 as manufacturers' agents, 6 as selling agents, 5 as bulk-tank stations, 2 as chain store warehouses, and 1 as a country buyer of farm products.

Of the 139 classified as wholesalers, 123 are wholesale merchants, 12 are commission merchants, 2 are drop shippers, and 2 are cash and carry wholesalers.

#### Wholesale Trade in Knoxville, Tenn.

The volume of business done by the 88 wholesalers proper located in Knoxville, Tenn., during the year 1929 amounted to \$31,947,404. These wholesalers employed 1516 men and women, paid them \$2.534,-725 in salaries and wages, and carried stocks at the end of the year whose cost value amounted to \$4,298,255. The 1930 population of Knoxville is 105,802.

The total volume of business which was transacted by all establishments in the wholesale field in Knoxville during 1929 amounted to \$49,861,667. This volume of business was reported by 127 establishments which employed 2018 men and women, paid them \$3,576,738 in salaries and wages, and carried stocks whose cost value at the end of 1929 amounted to \$5,280,288.

#### MEMPHIS WHOLESALE ESTABLISHMENTS, BY KIND OF BUSINESS

Kind of business	of establish- ments	of em- ployes	Net sales (1929)	Salaries and wages (total)	hand end of year (at cost)
Automotive group, total	31	670	\$19,458,537	\$1,385,025	\$2,331,454
Chemicals, drugs and allied prod-					. ,
ucts, total	. 15	394	10,460.874	578,363	1.096.078
Dry goods and apparel, total	. 21	408	11,737,421	755,603	1,895,908
Farm products (except dairy and					_,,
poultry products), total	. 166	828	293,604,025	1,746,800	11.244,678
Food and tobacco products, total		2,510	97,994,669	4,112,106	4,851,166
Furniture and house furnishings					
total		280	4,933,610	503,619	700,797
Hardware, electrical, plumbing	5				
and sporting goods, total		814	17,150,993	1,615,934	2,128,923
Lumber and building materials,					
other than metal, total		505	15,629,152	976,611	1,338,134
Machinery, equipment and sup-					
plies (except electrical), total.		667	13,013,909	1,339,120	2,041,152
Metals and minerals (except juni			0. 000 100	4 000 000	
and scrap), total		699	24,892,186	1.268,087	2,679,043
Other groups, total	. 60	959	62,394,119	1,547,520	1,728,270
Total	581	8,734	\$571,269,495	\$15.828,788	\$32,035,603

#### Wholesale Trade in Memphis, Tenn.

The volume of business done by the 367 wholesalers proper located in the city of Memphis during the year 1929 amounted to \$316,300,363. These wholesalers employed 6016 men and women, paid them \$10,840,116 in salaries and wages, and carried a stock at the end of the year whose cost value amounted to \$19,814,529. The 1930 population of Memphis is 253,143.

The total volume of business trans-

acted by all establishments in the wholesale field in Memphis in 1929 amounted to \$571,269,495. This volume of business was reported by 581 establishments which employed 9743 men and women, paid them \$15,828,788 in salaries and wages, and carried stocks whose cost value at the end of 1929 amounted to \$32,035,603.

Of the total 581 establishments of all types covered in this report, 367 are classified as wholesalers, 89 as manufacturers' sales branches, 78 as brokers, 21 as manufacturers' agents, 9 as selling agents, 7 as bulk tank stations, 3 as factors, 2 as chain-store warehouses, 2 as district sales offices, 1 as a city buyer of farm products, 1 as a warehouse, and 1 as a shipper (packer and shipper).

Of the 367 classified as wholesalers, 293 are wholesale merchants, 36 are commission merchants, 15 are export merchants, 11 are drop shippers, 7 are wagon distributors, and 5 are cash and carry wholesalers.

#### KNOXVILLE WHOLESALE ESTABLISHMENTS, BY KIND OF BUSINESS

	Number of establish- ments	Number of employes	Net Sales (1929)	Salaries and Wages (total)	hand end of year (at cost)
Automotive group, total Chemicals, drugs, and allied	. 8	133	\$3,310,279	\$244,388	\$444,839
products, total Dry goods and apparel,		156	3,831,702	290,357	531,704
tetal	15	372	6,714,955	743,507	1,458,782
ucts) total Food and tobacco products,	3	43	780,689	7,716	1,117
total	40	444	13,624,946	676,120	990,948
nishings, total	3	16	329,836	31,342	84,286
total	11	421	6,739,626	629,969	962,506
metal), total	จี	39	791,683	74,030	55,753
cal), total  Metals and minerals (except iron and steel scrap and other waste mate-	13	137	3,117,659	280,251	428,331
rials), total	10	180	9,295,509	497,289	137,190
Other groups, total	13	77	1,324,783	101,769	184,832
Total	127	2,018	\$49,861,667	\$3,576,738	\$5,280,288

#### 92,000 Acres Added to Park

Knoxville, Tenn. — The Champion Fibre Co., Canton, N. C., Reuben R. Robertson, president, has deeded 92,814 acres of land in the heart of the Great Smoky Mountains National Park to the

Tennessee, the property is composed largely of virgin timber and includes Mount LeConte in Tennessee and other large peaks on the state line. D. C. Chapman, chairman of the Tennessee commission, announces the land will be turned over to the government as soon Tennessee and North Carolina park as details are worked out. Tennessee commissions. Consisting of 52,000 acres has now acquired 190,000 acres for the in North Carolina and 40,000 acres in park and North Carolina 162,000 acres.

#### \$1,500,000 School Construction

Kansas City, Mo.—Tentative plans have been made by the Board of Education for the expenditure of approximately \$1,500,000 for school construction during 1931 and 1932. This will be a step in a 5-year school building program and is covered in a schedule outlined by Miss Annette Moore and Charles Baird. building committee of the board. As at present arranged, the 1931 program includes: Addition to Wendell Phillips (negro) school, addition to Ashland school, addition to Greenwood school, completion of auditorium of Paseo high school, completion of auditorium for Southwest high school and the improvement of playgrounds. The program for 1932 contemplates a new \$600,000 Lincoln high school at Twenty-first street and Woodland avenue, and an addition to the East high school at Van Brunt boulevard and Twentieth street.

# Floodgate to Protect

# Louisiana

# Farms

BACKWATERS of the Red and Atchafalaya rivers, which during the high water season usually inundate a large agricultural district in the vicinity of Bordelonville, La., will be diverted westward to the Gulf of Mexico, as the result of completion some months ago of a concrete and steel floodgate and of rerouting the Bayou des Glaizes. Under normal conditions the waters of this bayou are allowed to pass under the new gate; in time of flood water, the gate is to be closed to protect the surrounding territory.

Constructed by Doullut & Ewin, Inc., civil engineers and general contractors of New Orleans, under joint contract with the State of Louisiana and the Red River, Atchafalaya and Bayou Boeuf Levee District, the project involved a deep excavation alongside the old bayou channel, and the building of the floodgate. This floodgate rests 36 feet below the original ground line on timber piling and has long steel sheet piling cut-off

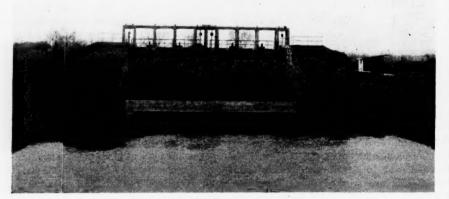


Wood and Sheet Steel Piling and Reinforced Concrete in Foundations of Bordelonville Floodgate

walls, concrete floor and side walls, and steel gates. On completion of the structure, the waters of the bayou were diverted through it by excavating new channels and by construction of an earth dam across the old bayou bed to join on to the walls of the floodgate.

During excavation of the 116,000 cubic yards of earth, and construction of the dam, three Thew Diesel-powered draglines were engaged. Vulcan and McKiernan-Terry pile hammers drove the 600

60-foot timber piles used. The 350 tons of steel sheet piling were furnished by the Carnegie Steel Co., Pittsburgh; reinforcing steel by the Laclede Steel Co., St. Louis; sand, gravel and cement by Henry W. Palfrey, Inc., Alexandria, La., and structural steel flood gates by the Virginia Bridge and Iron Co., Roanoke. All excavation work was sublet to Swinney & Coleman, Port Allen, La.



Completed Bordelonville Floodgate

#### \$3,000,000 Tulsa Station Opened

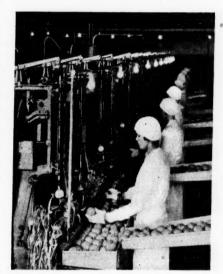
Tulsa, Okla.-Tulsa's new union passenger station, constructed at a cost of approximately \$3,000,000 in connection with an elevated street project, has been opened. The building is a model of architectural excellence as the result of study by the architects of the needs of the public. Railroads participating in the construction of the station organized the Tulsa Union Terminal Company, with J. E. Hutchinson, St. Louis, president, to handle the project. Plans were prepared by R. C. Stephens, St. Louis, architect for the Frisco Lines, and general contract handled by the Manhattan Construction Company, Tulsa.

# Orange Juice From Groves

HIPMENTS of solidly frozen orange juice in carload lots from Tampa, Fla., to distant cities, and delivery to homes in retail quantities, opens an advanced method of preserving freshness, with an economic system of delivery to the consumer. With specially designed machinery in its Tampa plant, the National Juice Corporation, a division of National Dairy Products Corporation, is undertaking "to capture the tree-freshness of the Florida orange," preserve it in convenient packages and deliver it ready for daily use.

Experiments were made at the research laboratories of the National Dairy Products Corporation, in Baltimore, before methods were adopted. In handling the fruit for juice extraction, the time element is important, and on arrival from the groves the oranges are immediately placed in a pre-cooling room at a temperature of 34 to 40 degrees; there they remain until ready for peeling and crushing. After sorting, the oranges are sized and carried to variously-geared machines, and the peeled fruit is discharged into stainless steel boxes and passes through troughs to presses made of the same acid-resisting metal. The oranges are ground and the juice is squeezed through a screen at the bottom of the press and into a pipe leading to the filter, where the coarse pulp and seeds are discharged. The partly clarito

# Homes



Oranges Are Peeled by Specially Designed Machines Geared for the Various Sizes of the Fruit

fied juice passes through a rotary screened filter, after which it is pumped to three 30-gallon tanks, preparatory to the initial freezing process.

From these tanks, the juice is discharged under 29-inch vacuum into a battery of six vertical direct-expansion ice-cream freezers operated under vacuum, and in three minutes becomes semifrozen. By introduction of nitrogen, it is forced into a large hopper, from which the containers are filled, especially designed paraffined cartons and cans being used. The cartons are capped and machine-sealed and passed on to belt conveyors to fhe "hardening" room, where a temperature of 10 degrees below zero is maintained, and in a few hours the juice is frozen solid. Cartons awaiting. shipment are removed to a storage room. at a temperature between 5 and 10

Milk and ice-cream divisions of the National Dairy Products Corporation operating in conjunction with the National Juice Corporation receive this juice in the containers as frozen and deliver it in the frozen state along their usual routes. It is said that the juice may be placed in the home refrigerator and kept, like milk. D. Collins Gillett of Tampa is vice-president and general manager of the juice corporation. The investment in the new undertaking is said to be \$1,000,000.



In This Room the Already Partly Frozen Orange Juice Is Subjected to a Final Temperature of 10 Degrees Below Zero

# Census of Manufactures, 1929

HIS article concludes the Census summaries of individual Southern States and principal cities compiled from the 1930 preliminary reports issued by the Census Bureau covering the year 1929. Similar summaries for Alabama, Florida, Georgia, Maryland, North Carolina, South Carolina, Tennessee, Texas and Virginia were published in previous issues of the MANUFACTURERS RECORD. Every Southern state reported an increase in manufacturing activity in 1929 compared with 1927 and 1919. The decrease in the number of establishments reported in 1929 and 1927 for each state as compared with 1919 is explained by the fact that the 1919 census included all establishments having products valued at \$500 or more, whereas the productionvalue-of-products limit for subsequent years was \$5000. This change, states the Census Bureau, had very little effect on the comparableness of the figures for different census years, with exception of figures for number of establishments.

#### Missouri

The Census of Manufactures for Missouri covered manufacturing activities in 1929 as follows: Number of establishments, 5757: number of salaried officers and employes, 37,605; number of wage earners (average for the year), 201,174; salaries paid, \$91,450,218; wages, \$238,-432,655; cost of materials, \$1,096,224,-499; cost of fuel and purchased electric energy, \$28,743,159; value of products, \$1,876,140,033; value added by manufacture, \$751,172,375; horsepower (rated capacity) of prime movers, 217,607; horsepower of electric motors driven by purchased energy, 497,192. The number of wage earners and the value of products represent increases of 3 per cent and 12.7 per cent, respectively, as compared with 195,378 wage earners and products valued at \$1,665,173,463 reported for 1927, the last preceding census year.

#### Kentucky

According to the Census Bureau, the value of manufactures in Kentucky in 1929 was \$490,492,000, or a gain of about \$100,000,000 compared with 1919. The number of establishments reported in 1929 was 2227 with 10,634 salaried officers and employes, and 76,201 wage

earners (average for the year). The number of wage earners and the value of products represent increases of 1.7 per cent and 9.5 per cent, respectively, as compared with 74,912 wage earners and products valued at \$447,764,961 reported for 1927, the last preceding census year.

#### SUMMARY FOR KENTUCKY

•	Number of establish- ments	Wage earners (average for the year)	Wages	Cost of materials, fuel and purchased electric energy	Value of products	Horse-
The State:						
1929 1927 1919	1,851	76,201 74,912 69,340	\$87,517,967 \$3,858,607 67,033,546	\$262.557,633 250,632,957 235,715,626	\$490,492,239 447,764,961 395,660,417	352,229 318,755 246,399
Cities having 10,0	00 inhabita	nts or more	, 1929:			
Bowling Green Covington Henderson Louisville Newport Owensboro Paducah	108 18 692 46 51	272 3,328 956 35,188 2,377 1,764 3,923	329,053 4.538,271 736,479 40,792,930 3,478,621 1,446,092 3,838,118	548,036 7,757,888 2,336,847 137,902,379 11,738,150 5,863,822 8,129,706	$\substack{1.272,074\\18,773,645\\4,118,916\\262,547.394\\19,838,952\\10,867.976\\16,071.760}$	2,244 7,621 4,978 119,424 11.084 6,696 8,213

#### Oklahoma

In 1929 Oklahoma reported 1651 manfacturing establishments with an output of \$452,000,000 and paid out \$294,916,000 for materials. The number of

wage earners and the value of products represent increases of 12 per cent and 21.6 per cent, respectively, as compared with 27,932 wage earners and products valued at \$371.718,409 reported for 1927, the last preceding census year.

#### SUMMARY FOR OKLAHOMA

	Number	Wage earners (average		Cost of materials, fuel		
	establish- ments		Wages	and purchased electric energy	Value of products	Horse- power
The State:						
1929	1.651	31.279	\$40,721,920	\$306,990,041	\$452,161,249	221 808
1927	1.373	27.932	35,785 266	269,418,221	371,718,409	185,480
1919		29,503	35,025,942	312,605,829	401,362,869	139 550
Cities having 10,00	00 inhabits	ants or more	e, 1929 :			
Ardmore	27	216	253,394	771.607	1,593,111	1,465
Bartlesville		103	165,955	272,923	785,856	710
Chickasha	00	396	479,691	2.978,157	4,309,596	2,227
Enid		737	967,599	7.660,118	10,447,045	6,213
Muskogee	-	1.248	1,773,582	10,645,256	14,826,720	6.385
Oklahoma City		5,530	7,645,056	49,190,894	81,002,795	19,833
Okmulgee	07	429	571,656	4,247,967	5,728,214	2.917
Sapulpa		180	227,560	431,687	1,220 128	1,068
Shawnee	OF	873	1,074,531	3,795,451	5,708,744	4 937
Tulsa	170	3.078	4.888,694	9,540,605	26,802,337	17.368

#### SUMMARY FOR MISSOURI

Number of establish ments	(average	Wages	Cost of materials, fuel and purchased electric energy	Value of products	Horse-
The State:				04 070 440 000	m4.4 m00
1929 5,757		\$238,432,655	\$1,124 967,658	\$1,876,140,033	714,799
1927 5,422	195,378	230,017,241	1.004,709 373	1,665,173,463	656,269
1919 8,592	195,037	196,515,353	1,056,457,164	1,594,208,338	476,648
Cities having 10,000 inhabit	ants or more	e, 1929 :			
Cape Girardeau 27	1.960	2.070,558	8,562,928	14,639,778	13.819
Hannibal 37	3.807	3.877.602	11.055 513	21,033,978	9.107
Independence 22	795	1,062,790	5,576,746	9,870,694	3.574
Joplin 77	1.682	1.686.082	11.282.104	17.130,266	6,498
Kansas City 904		38,402,756	195,662,400	340,890,312	102,701
St. Louis 2,704		133,051,352	569,318,573	983,823,009	290.094
			16.471.582	28,173,258	14.875
Springfield 90	3,470	4,195,476	10,411,082	20,110,200	14,010

#### Mississippi

In 1929 there were 1912 manufacturing establishments in Mississippi which produced \$220,000,000 of manufactured goods. These establishments paid out \$42,508,000 in wages, \$9,266,000 in salaries, \$109.253,000 for materials, and \$3,839,000 for fuel and electric energy. The value added by manufacture was \$107.116,267; horsepower (rated capacity) of prime movers, 196,243; horse-

power of electric motors driven by purchased energy, 56,354. The number of wage earners and the value of products represent increases of 2.9 and 12 per cent, respectively, as compared with 50,569 wage earners and products valued at \$196,640,742 reported for 1927, the last preceding census year.

#### Louisiana

The 1930 census of manufactures in Louisiana covering the year 1929, shows the following: Number of establishments, 1986; number of salaried officers and employes, 10,223; number of wage earners (average for the year), 87,511. The number of wage earners and the value of products represent increases of 6.2 and 7.3 per cent. respectively, as compared with 82,415 wage earners and products valued at \$638,361,215 reported for 1927, the last preceding census year.

#### Arkansas

Arkansas' manufacturing activities in 1929 included: Number of establishments, 1731; number of salaried officers and employes, 4541; number of wage earners (average for the year), 44,073. The number of wage earners and the value of products represent increases of 10.1 and 14.4 per cent, respectively, as compared with 40,032 wage earners and products valued at \$182,750,871 reported for 1927, the last preceding census year.

#### West Virginia

The value of West Virginia's factory output in 1929 was \$500,000,000 as reported by 1487 establishments. These establishments spent \$225,000,000 for materials and \$28,000,000 for fuel and electric energy. The number of wage earners and the value of products represent increases of 8.8 and 9.9 per cent, respectively, as compared with 77,630 wage earners and products valued at \$455,-216,551 reported for 1927, the last preceding census year.

#### SUMMARY FOR MISSISSIPPI

The State:	Number of establish- ments	wage earners (average for the year)	Wages	Cost of materials, fuel and purchased electric energy	Value of products	Horse- power
	4 040	<b>70.000</b>	040 200 000	0110 000 117	0000 000 444	070 707
1929	1,912	52,039	\$42,508,069	\$113,093.147	\$220,209,414	252,597
1927		50,569	40,734,359	105,559,493	196,640,742	214,232
1919	2,400	57,560	51,255,716	96,677,871	197,746,987	200,772
Cities having 10,0	00 inhabita	nts or more	e, 1929 :			,
Biloxi	36	822	500,665	1,489,639	2,942,074	1,398
Columbus	19	388	360.966	1,125,623	2,019,434	2,034
Greenville	26	1.023	859,533	3,287,415	5,687,952	5,719
Jackson	91	2.074	2,116,594	12,645,777	19,183.582	12,837
Laurel		3,635	3.296.824	6.266,772	15,921,909	20,662
Meridian	4.4	1.213	964,475	5,643,420	8,887,922	5.179
Vicksburg		1,364	1,582,902	2,226,157	5,910,637	6,022

#### SUMMARY FOR LOUISIANA

	Number of establish- ments	Wage earners (average for the year)	Wages	Cost of materials, fuel and purchased electric energy	Value of products	Horse-
The State:				•		
1929 1927 1919	1,624	87,511 $82,415$ $98,265$	\$83,990,368 79,673,477 94,405,732	\$441.979,590 427,994,341 431,403,867	\$684,885,999 638,361,215 676,189,770	488,507 415,582 387,233
Cities having 10,0	00 inhabita	nts or more	, 1929 :			
Alexandria	36 25 33 787	$\begin{array}{c} 745 \\ 1,051 \\ 321 \\ 1,511 \\ 22,597 \\ 2,629 \end{array}$	761,370 853,303 332,649 1,937,131 21,393,804 2,956,653	2,438,801 1,896,897 2,963,792 4,070,844 82,591,971 13,033,877	$\substack{4,668,710\\4,563,133\\4,666,767\\7,787,769\\148367,650\\21,995,242}$	3,862 4,421 3,117 5,246 80,936 13,131

#### SUMMARY FOR ARKANSAS

	Number of establish- ments	Vage earners (average for the year)	Wages	Cost of materials, fuel and purchased electric energy	Value of products	Horse- power
The State:						
1929	1.731	44,073	\$39,221.333	\$115,029,917	\$208,897,093	221,637
1927	1,146	40,032	35,288,168	103,815,280	182,750,871	183,041
1919		49,954	47,186,189	102,812,977	200,312,858	212,219
Cities having 10,	000 inhabits	ants or more	e, 1929:			
Fort Smith	84	3.012	2,765,126	8.343,607	15,786,331	9,521
Hot Springs		215	230,862	506,554	1,302,880	1,792
Little Rock		3,449	3,181,128	11,992,813	21,308.698	12,609
North Little Rock		2,535	3,547,128	6,736,849	11,713,549	11.870
Pine Bluff	47	1,417	1,301,600	5,077,487	8,325 367	11,573
Texarkana (Ark.)	16	199	179.055	1,573,195	2,237,105	1,738

#### SUMMARY FOR WEST VIRGINIA

	Number of establish- ments	earners (average for the year)	Wages	Cost of materials, fuel and purchased electric energy	Value of products	Horse-
The State:						
1929 1927 1919	1,313	84,460 77.630 83,036	\$114,130,578 103,431,224 101,840,420	$$253,609,031 \\ 252,884,424 \\ 270,940,596$	\$500,393.174 455,216,551 471,970,877	666,871 546,440 328,455
Cities having 10,0	00 inhabita	nts or mor	e, 1929:			
Bluefield Charleston Clarksburg Fairmont Martinsburg Morgantown Moundsville Parkersburg Wheeling	88 51 31 27 31 19 55	1,482 2,356 2,994 2,152 3,080 954 1,244 1,952 7,472	1,920,836 2,977,542 3,986,700 2,899,633 2,709,894 1,288,199 1,593,591 2,593,389 10,100,213	2,257,682 7,336,271 7,381,952 5,565,326 5,843,962 1,004,195 2,498,780 9,965,337 31,304,245	5,323,981 16,263,409 16,302,189 12,821,423 10,584,730 3,458,060 6,571,969 16,292,200 53,389,126	6,159 11,339 12,752 13,029 4,299 2,808 2,008 9,175 32,118

#### South In Foreign Trade

Representatives from more than 20 countries are expected at the Southern Foreign Trade Conference at New Orleans, September 28 and 29, by G. S. Hensley, chairman of the planning committee. The Pan-American Institute for Reciprocal Trade will hold an executive session concurrently with the Conference. Frank V. Dunham, trade commissioner of the New Orleans Association of Commerce, now in Central

America, is inviting officials and others to attend the New Orleans meeting.

#### \$615,000 Post Office Extension

Houston, Tex.—Jas. A. Wetmore, Acting Supervising Architect of the Treasury Department, Washington, opens bids in duplicate in his office June 16, for enlarging and remodeling the United States post office and court house building here, estimated to cost \$615,000.

## \$21,505,000 Paid Birmingham

#### Factory Workers

In the Census summary of manufacturing in Alabama, published in last week's issue, the amount of wages pand to factory workers in Birmingham was given as \$1,505,000. This figure should be \$21,505,390, instead of \$1,505,000, due to a typographical error in the Census Bureau's preliminary report.

# IRON, STEEL AND METAL MARKET

# A Slight Decrease in Demand

for Steel

Pittsburgh, May 18—[Special.]—Steel demand in general is showing no improvement and in some respects it slipped a little more in the past week. Apparently there will not be much further decrease to July, which regularly is a low month. This is the period of usual seasonal decline and the further decline may be at half or less than half the pace of the recent decline, the top rate of steel ingot production having occurred just after the middle of March.

On the whole, the decrease seems to be more than the average seasonal decrease, but on the other hand the preceding increase, after December, was at least double the usual or conventional increase. Steel production is not expected to go as low in July as it was in December, whereas in some years July has been decidedly below the preceding December.

Steel demand is being watched as a possible index to general industrial and business conditions, rather than as a measure of prosperity or adversity within the steel trade itself, for the fact is that steel producers think little of these small changes, which they regard as minor items or details. Their general philosophy is that any operation under 65 or possibly 60 per cent is a bad one, and the present producing rate of about 45 per cent is not much different from a 40 or a 50 per cent operation, the point being that unit costs go up sharply when there is a rate under about two-thirds of capacity.

A rough forecast may be made that steel production in the current quarter may be around 5 per cent under first quarter production, which was 15.4 per cent over the fourth quarter, by far the poorest quarter of last year. This decrease in tonnage, with slightly lower realized prices on some shipments, indicates lower steel company earnings in the current quarter. Some large companies showed lower earnings last quarter than in the December quarter, despite the increase in tonnage, but there are those who think that perhaps there were unusually heavy charges to running expenses. No one suspects, except perhaps in isolated instances, that there has been any disposition to pad the profit and loss account.

Predictions are that this month's automobile production will slightly exceed that of April, making the sixth month of successive increases, as November was

the low month and a very low one. Next month is expected to show lighter production. May is sometimes the peak month, but April more commonly.

With automobile trade requirements in steel fully maintained, but a decrease of about 20 per cent in the total steel demand, as indicated by the decrease in steel production from the peak rate, there must be greater than 20 per cent decrease in some lines. Estimates are that the railroads have had the greatest decrease of all important consumers, as they must practice more and more rigid economy with their greatly decreased earnings. There was not much car and locomotive building early in the year, but now there is practically none, and delivery releases on annual rail purchases have decreased markedly. Thus the Chicago district rail mills are reported as operating at 40 per cent last week against 45 per cent the preceding week. Some of the decrease in steel demand is attributed to buyers being even more conservative than early in the

The attempt of mills to secure a dollar a ton more on bars is now undergoing the real test. First quarter contracts at 1.60c Pittsburgh were extended for specification to May 1, and now customers are expected to specify against second quarter contracts, which are at 1.65c. Buyers are showing some resistance and it is an open question whether mills will be able to stand their ground. Sheets are a shade easier but there will be an attempt to secure higher prices for third quarter, the same being true of strips.

Heavy melting steel scrap is now at the lowest price since the early days of 1915.

#### Zinc Price Advances—Demand for Metals Somewhat Improved

New York, May 18-[Special.]-For the price of a metal to advance these days is news. This is what has happened to zinc, which has improved \$2 per ton at least, after having dipped the previous week to the lowest level since 1896. Shortly after the price started advancing, demand improved, particularly from those who make galvanized sheets, wire, etc. The export price of copper has been reduced the equivalent of 1/4c per pound so that Europeans are now buying American copper at virtually the lowest price in their history. Tin has been steady and lead has been unchanged following a further reduction by \$5 per ton, making a complete mark down of \$15 per ton this spring.

Luckily some improvement in industrial conditions has been noted. Automobile production in May promises to be considerably larger than the 350,000 cars and trucks made in the United States and Canada during April. Building permits in some of the leading cities have increased. Fabricated structural steel business continues very active which also indicates good building con-The Government is making ditions. progress in awarding contracts for post office construction, the steel just having been let for such buildings at Boston and Camden. Steel warehouses made slightly better sales in April than during March. Tin plate production is 70 to 75 per cent of capacity which is considerably above the average rate for the steel industry as a whole.

Metals sales have been somewhat better. Export sales of copper improved considerably on Wednesday when the export price was marked down, the total for that day having been 2000 tons. Lead sales were also more voluminous though far from a buying movement. Lead consumption this spring is only 50 per cent normal and purchasing has been in the same proportion. The improvement in zinc sales has been noted. Only tin remains stagnant and since that is not a metal of American origin dullness therein is of less concern to the metal industry.

The minor metals have been steady except in the case of antimony which has dipped to new low levels for the past several years, selling now at 61/2c per pound, duty paid. The two silvers hold steady, ordinary silver keeping above 28 cents per ounce and quicksilver above \$102 per flask of 76 pounds. The chief news of the week pertaining to silver has been the refusal of the United States to take the lead in calling an international conference. Trading in silver futures is to start on the National Metal Exchange, New York, at the middle of next month, being the only exchange in the world to trade in that metal.

Metal statistics for April have shown increases in surplus stocks. Zinc stocks increased 1700 tons, while stocks of refined copper gained 14,000 tons, though blister stocks fell nearly 5000 tons. In both metals, shipments were unusually low. In the case of copper, domestic shipments were relatively smaller than export. The April statistics for copper were not regarded as truly representative of the situation by reason of the

fact that little of the purchasing of late 1930 and early 1931 specified April shipment. It is expected that May statistics will be more encouraging until there is a widespread request for postponement of shipments scheduled for this month.

The agitation for a duty on copper in Arizona has become more insistent and organized. The Governor of that State called a meeting on May 11 at which many prominent business and industrial leaders of the State were present. A committee was appointed to study the need for a tariff and to try to secure cooperation from officials in other copper producing states in agitating for a duty. Copper operations in Arizona are said to be 40 per cent of normal and some mines have announced a longer "summer vacation" than usual.

The export price of copper is now 9.525c per pound, cost, insurance, freight at European ports. This odd figure is due to the fact that copper exporters have passed along to foreign consumers the benefit of a cut by 50 cents per ton in ocean freights, the new rates being \$4.75 per ton.

The domestic price of copper was quite generally 9 cents per pound, though some producers held nominally to 91/4 cents. With the reduction in the export quotation on Wednesday the lower domestic price received wider recognition.

The recent two cuts in lead by a total of \$5 per ton surprised many in the trade but the purpose of the cuts was probably to discourage any increase in production and also to find a level at which consumers would buy. Before this recent reduction, lead was the lowest since 1921: now the metal is bottom since 1915 and in fact but \$1 per ton above the low point of that year.

It is expected that lead statistics will also reveal an increase in surplus stocks. Sixteen lead and zinc mines in the tri-State district have been closed down because of the low price of ore.

#### No Material Change in Pig Iron

Birmingham, Ala., May 18-[Special.]-General tone of the pig iron market is no better, there has been a downward trend recently and a little tonnage has gone to the surplus stock. Production and base price have remained firm, \$12 to \$13, No. 2 foundry being the base in the home territory. Melters have been buying in small lots and the purchases have been lagging. Cast iron pressure pipe shops, the steady melters of iron, are on a 50-per cent capacity production. Several foundries employing pig iron in their daily operations are resuming operations on curtailed schedules after shut-downs of two to four weeks and there is a little better feeling.

For the past week the amount of iron going to surplus has been reduced. Expected business by pipe makers, foundries and other melters of iron give encouragement, though there is doubt of any great activity for the next 90 days. Thirteen blast furnaces are still producing iron, eight on foundry iron, four basic and one special brand. Production is to be reduced by banking of fires at one or more furnaces.

In steel circles there is still a 65 per cent capacity operation reported, so far as the industry as a whole in this district is concerned. Fourteen to sixteen open hearth furnaces are producing ingots. Structural steel fabricating shops are on a reduced schedule and the market is quiet. Small-tonnage contracts are reported from week to week but the aggregate is not heavy. Chicago Bridge & Iron Company will fabricate the 100,-000-gallon water tank and tower for the veterans hospital to be built at Tuscaloosa, Ala., this year, but less than 100 tons of steel will be used. Virginia Bridge & Iron Company, the Ingalls Iron Works Co., the Southern Steel Works and others are shipping steadily, and contracts on hand are being worked down more rapidly than new business is coming in. Nashville Bridge Co. will ship 1100 tons of bridge material within the next 60 days and a report of lagging trade emanates from that source also.

There is little business being received by plate fabricators, tank requirements having eased off some.

Sheet and plate mills are still active, operating at more than 50 per cent capacity. Wire and wire products continue slow. Other shapes than those mentioned are not gathering much momentum.

#### PIG IRON

No. 2 foundry, 1.75 to 2.25 per cent sili-con, \$12.00 to \$13.00; No. 1 foundry, 2.25 to 2.75 per cent silicon. \$12.50 to \$13.50; iron of 2.75 to 3.25 per cent silicon, \$13.00 to \$14.00; iron of 3.25 to 3.75 per cent silicon, \$14.50 to \$15.00.

#### OLD MATERIAL

Steel rails	\$10.00	to	\$11.50
Steel axles	14.50		15.50
Iron axles	14.50	to	15.00
Heavy melting steel	9.50	to	10.50
No. 1 cast	10.00	to	10.50
Stove plate	8.50	to	9.00
No. 1 railroad wrought	8.50	to	9.00
Car wheels	10.00	to	10.50
Tramcar wheels	10.50	to	11.00
Machine shop turnings	6.50	to	7.00
Cast-iron borings	6.50	to	7.00
Cast-iron borings (chem.)	12.50	to	13.00
Rails for re-rolling	10.25	to	10.75

The Treasury Department, Washington, Jas. A. Wetmore, Acting Supervising Architect, opens bids May 28, to remodel the old municipal building at Lynchburg, Va., for a post office,

# Garden Furniture of Cast Iron and Aluminum



Garden furniture of aluminum is being produced by the Walker Machine & Foundry Corporation, Roanoke, Va. Copies are made of some of the good examples of rare craftsmanship to be found in various parts of the country. The furniture is turned out in a dull satin Duco finish obtainable in a number of shades and colors. Aluminum garden furniture, it is pointed out, has the peculiar advantage of extreme lightness, strength and smoothness of texture; it permits sharp castings and is impervious to rust. The aim is to produce a furniture that will add materially to the charm of terrace or lawn.

# AVIATION, AIRPORTS AND AIRWAYS

## Birmingham's Municipal Airport

## Completed

The \$1,000,000 municipal airport just completed at Birmingham, Ala., will be officially dedicated with a three-day ceremony, May 30-31 and June 1. The field, covering 315 acres, is only 41/2 miles from downtown Birmingham, a 15-minute drive on paved thoroughfares from the post office. An asphalt runway, 100 feet wide and 3700 feet long, extends north and south at a slight angle. The longest way of the field offers 11/2 miles of runway. Concrete taxi strips and aprons to the hangar and administration building are provided to eliminate dust, The remainder of the field will be sodded. Equipment includes meteorological radio station, teletype and range beacons and complete lighting for night flying; the port is being made eligible for the A-1-A rating of the Department of Commerce, Birmingham will be on the Southern Transcontinental Airway and the initial landing of that company's planes will be made on the first day of the dedication.

The terminal building of Southern Colonial architecture provides waiting rooms, ticket office, manager's office, private operators' offices, dining room, lounges for pilots, pilots' dormitories and private rooms, baggage and check room, ladies' parlor, concession shops, coffee shop, post office, hospital and first aid room. Over the two wings of the building are tiled roof terraces to be used by

the public for observation. The cupola serves as a central observation tower in which are located controls for the field lighting equipment. It is possible also, to control all field lights from a point in the hangar and from the manager's office. The hangar, 120 by 150 feet, of brick and steel, provides ample facilities for servicing, and houses 25 to 30 average sized planes. Lean-tos house the repair shop, boiler room, locker rooms, field garage, oil and pump room and offices. Four second-floor rooms will be used as offices and for dormitories.

Construction materials used in the airport include the following: Two miles of pipe sewers; 850,000 common brick in sewers, 2200 barrels of cement, 500 yards of sand, 10,000 yards of slag, 5000 pounds of reinforcing steel, 135,000 brick, 60,000 board feet of lumber, 25,000 square feet of hollow tile, 150 cubic yards of brick mortar, 26 tons of steel, 175 tons of structural steel, and miscellaneous items, such as doors and sash. Also 350,000 cubic yards were excavated and graded, and 15,000 cubic yards of rock were removed.

Buildings were erected by A. J. Honeycutt, Birmingham, and other contracts were handled by the following firms:

Grading—Millsap & Parker, Birmingham, and Nichols Construction Co., Macon, Ga., jointly Sodding—City forces

Courtesy Public Relations Division Birmingham Chamber of Commerce

Terminal Building, Modeled Along the Lines of Mount Vernon

This new structure, together with the million dollar airport, will be dedicated next
week with appropriate ceremonies

Drainage—Sullivan-Long & Haggerty, Bessemer, Ala.

Hangar Doors—Detroit Steel Products Co., Birmingham

Plumbing and Heating—Heck Plumbing & Heating Co., Birmingham

Interior Electric Lighting—O'Keefe & Lyons Electric Co., Birmingham

Exterior Electric Lighting—Rogers Electric Co., Inc., Birmingham

Concrete Aprons and Taxi Strips—Fromhold Bros., Birmingham

hold Bros., Birmingham

Fence—Anchor Post Fence Co., Baltimore,
Md., through local agent, Southern Steel
Works Co.

WORKS CO.

Floodlights—General Electric Co., Schenectady, N. Y., and Crouse-Hinds Co., Syracuse, N. Y., through Graybar Electric Co., Birmingham

Paved Runway-Independent Paving Co., Birmingham.

#### New York-Richmond Planes

Washington, D. C .- The first of a fleet of three 18-passenger Curtiss Condors has been delivered by the Curtiss Aeroplane & Motor Co., Inc., Buffalo, N. Y., to the Eastern Air Transport, Inc., Brooklyn, N. Y., according to H. A. Elliott, vice-president and general manager of the latter. The new plane has been put in service on the New York-Washington-Richmond section of the Eastern Air Transport system, bringing the total number of planes in operation on this line to four Condors and a Ford Tri-Motor, the latter a reserve plane. The Condor has a cruising speed of 125 miles an hour and a high speed of 145 miles, with a full load of passengers, baggage and mail.

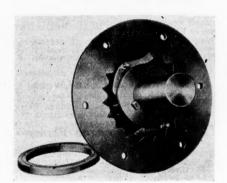
#### Cincinnati-Atlanta Air Service

Atlanta, Ga.-With promise of becoming one of the most important north and south aviation trunk lines, an air passenger service between Cincinnati, Ohio. and Atlanta, has been inaugurated by the American Airways, Inc. According to John Paul Riddle, general manager of the Embry-Riddle Division of this corporation, a daily schedule will be maintained between the two cities with fast transport planes having a cruising speed of more than 120 miles per hour. Intermediate stops for passengers and air mail will be made at Louisville, Nashville and Chattanooga. Importance is attached to the new service because of excellent air mail and air passenger connections to Florida, Cuba, the West Indies, South American countries, Southern cities in the United States and cities in Mexico. The new line will also serve as a connecting link with the Southern transcontinental air line system of the American Airways, from Atlanta to Los

# NEW AND IMPROVED EQUIPMENT

#### Landahl Back Stop

The Fairfield Engineering Company, Marion, Ohio, recently introduced the Landahl life-time back stop, designed to prevent shaft reversal. The construction of this device is described as "serving not only as an unusually efficient back stop but also as a bearing." Its internal construction consists of two locking pawls mounted on pins held by two floating rings and pawl. These parts rotate as a unit by engagement of the pawl with the pawl collar which is so shaped that the pawl does not engage the ratchet as long as the shaft is traveling in the correct direction. Wear is reduced to a minimum, as all parts are rigidly constructed, the pawls engaging and disengaging without rubbing the



For Prevention of Shaft Reversal

ratchet, and all parts rotating in oil. The back stops are built in two types and the housing is made in two parts. bolted together and provided with paper shims to keep it oil tight.

#### One-Yard Excavator

A new full revolving 1-yard excavator, known as P&H model "500," has been announced by the Harnischfeger Corporation, Milwaukee, Wis. Main frames are unit alloy steel castings and wearing parts are of alloy heat treated steels, while drums are in tandem and operate through the P&H power clutch control. A minimum number of gear reductions makes for simplicity. Gasoline, Diesel, or electric motors provide power for the machine, whether operated as shovel, dragline, crane, clamshell, hoe or skimmer. Corduroy (crawler) frames are cast from alloy steel and bolted directly to the carbody. They employ the P&H double sprocket drive

with a shovel of box-section construc- cab is of steel.

directly engaging the link pins, and 12 tion. A one-yard dipper with mangapairs of alloy heat treated rollers distrinese steel front and renewable, reverbute weight through the corduroy shoes sible teeth is standard. Dragline and to the ground. The patented P&H crane booms are of trussed structural chain crowd with fast return is used, design, 40 feet long, and a fully enclosed



This & H Model "500" Is Full Revolving and Performs Variety of Tasks

#### Blaw-Knox "Trukmixer"

Following a long period of research and development, the Blaw-Knox Company, Pittsburgh, Pa., manufacturers of steel products, announce a transit concrete mixing body known as the Blaw-Knox "Trukmixer." Leading features emphasized include: Positive water control, thorough and uniform mixing, rapid mixing, and clean discharge of all consistencies of concrete mixes. The mixing drum is octagonal in shape, tapered on both ends; it automatically

reverses rotation during mixing, thus giving a true end to end mixing action. Blades in the drum consist of flat steel plates attached to the inside face. They are easily removed and replaced as units in short sections, obviating the necessity of rebuilding the entire blade system. A forced feed automatic water supply system is used, which removes the measurement of water from control of the truck driver. Blaw-Knox Trukmixers are made in capacities of 2, 3, 4 and 5 cubic yards for mixing and from 2 to 8 cubic yards for agitating pre-mixed concrete.

Designed for Mixing Concrete in Transit



# CONSTRUCTION DEPARTMENT

Covering
the initial
announcements
of new undertakings with
additional informationabout
enterprises previously mentioned. The date
at the end of
an item indicates preliminary facts were
given in a previous issue.

# NEW ENTERPRISES

Building and Construction Proposed and Contracts Awarded; Manufacturing, Mining, Power, and Land Developments; Public Works; Transportation; Communication; Financial Enterprises; New Business Opportunities Reported in the Sixteen Southern States.

When writing to a new firm or corporation the name of at least one of the incorporators should be placed on the envelope to expedite its handling by the local postoffice. Mail may be delayed unless complete address is given.

The Daily Construction Bulletin of the Manufacturers Record gives each business day advance news published in this weekly review. It is invaluable to those requiring prompt information. Subscription price \$40.00 a year.

#### Airports, Airplane Plants, Etc.

Ga., Decatur—C. H. Blount, Clyde Walter and associates, reported, acquired option on 534 acre tract ½ mile from Decatur for commercial airport; plans erecting terminal building; S runways; sewerage; water and flood lighting facilities; Charles F. Russell, will supervise building and operating of field.

La. New Orleans—Office of Chief, W. S. Erwin, Division of Purchases and Supplies, Dept. of Commerce, Washington, D. C., receives bids June 12 for installation of lighting facilities on New Orleans-Atlanta Airway. See Want Section—Bids Asked.

La., Shreveport-See Sewer Construction.

Md., Riverdale—Robey-Lambert Airplane
Co., Kenneth A. McRae, Res. Agt., 115 Jefferson Ave., changed name, to Robey-Lambert Diesel Engine Co.; manufacture airplanes. 5-12

Mo.. Cassville—City, reported, considering establishment of airport.

N. C.. Winston-Salem—Camel City Airlines, Inc., executive offices at Miller Municipal Airport, Winston-Salem, general traffic offices, Knoxville, Tenn., chartered; H. R. Finnell, Richmond, Ky., Pres.; will operate passenger airplane routes between Winston-Salem, and Louisville, Ky., between Detroit, Mich. and Atlanta, and between Louisville and Chicago; have purchased 6 Bellanca Pacemaker monoplanes, cost \$49.500.

Okla. Tulsa—City. H. A. Parker, Engr., reported, receives bids May 21 for administration airport building: cost \$75,000; will also construct hard surfaced runway; Leon Senfer.

Tex., Laredo—Wayne Parks, Mgr., San Antonio Airport, reported, negotiating for lease from city on Laredo airport site to build runways and hangar to provide city with facilities for direct air connection with San An-

Tex., Mineral Wells—T. B. Baker of Baker Hotels, reported, construct hangar Easterwood Field 110x200 ft.; brick, conc. and steel; cost \$75,000.

Tex.. San Antonio — Southern Airways, Inc., South Loop Road, reported, construct hangar at Winburn Field, 84x100 ft.; cost \$10,000.

Tex., Terrell—City, reported, plans establishing airport.

lishing airport.

Va., Langley Field, Hampton—War Dept.,
Office of Constructing Quartermaster, Fort
Monroe, receives bids June 11 for furnishing
materials and performing work for filling
and grading for extension of flying field.
See Want Section—Bids Asked.

5-14

Va., Langley Field, Hampton—Office of Constructing Quartermaster, Fort Monroe, receives bids June 15 for construction of 11 air corps hangars, etc. See Want Section—Bids Asked.

#### Bridges, Culverts and Viaducts Proposed Construction

Arkansas—State of Arkansas receives bids for 5 bridges. See Roads, Streets and Pav-ing.

Florida—State Road Dept., Robert W. Bentley, Chmn., Tallahassee, has low bid from Dudley-Murphy Construction Co., Wagg-Wil-

son Bldg., West Palm Beach, at approx. \$24,-500, for 3 34-ft. rein. conc. deck girder span bridges, Road 4, FAP 78-B, Broward County. (See Roads, Streets and Paving, 5-7.)

Ga., Atlanta—City, C. E. Kauffmann, Bridge Engr., open bids in about 5 weeks for \$68,500 Broad St. viaduct over railroad yard, 135 ft. long, rein. conc., earth excavation, rein. steel, struc. steel, asphalt roadway, with alternate on brick and asphalt plank.

La., New Orleans—New Orleans Public Belt R. R., Frank H. Joubert, Sec.-Treas.-Gen. Mgr., Municipal Bldg., recalled bids for \$15,-000,000 railroad and highway bridge over Mississippi River.

La., Plaquemine—Iberville Parish Police Jury, W. A. Holloway, Sec., opens bids June 16 for steel bascule span with minimum net clear opening of 44 ft. and 100 ft. creosoted timber trestle approach of 10-ton capacity and 18 ft. clear roadway with 4 lines 3/16 x24 in. steel runners, Grosse Tete.

Missouri-State Highway Comsn. receives bids for 41 bridges. See Roads, Streets and Paving.

Mississippi-See Roads, Streets and Paving.

Mississippi—see Roads, Steets and Taving.

Miss., Rolling Fork — Sharkey County
Supvrs., W. H. Carroll, Clk., open bids
June 1 for 2-span bridge over drainage
canal, Fifth Dist., 5600 ft. treated lumber
and 200 lin. ft. piling in place; take separate
bids same date for reflooring Anguilla steel
bridge, approx. 30,000 f. b. m. creosoted
flooring; also for furnishing creosoted bridge
naterials for balance of year 1931.

N. C., Murfreesboro—Camp Mfg. Co. has modified plans for bridge over Meherrian River, providing for steel swinging drawspan instead of lift span opening to maximum of 70 degrees, as proposed originally, approved by War Dept., Washington.

Tex., Bexar—Bexar County Commrs. Court, San Antonio, and Guadalupe County Commrs. Court, Seguin, build bridge over Cibolo Creek, Seguin-San Antonio Highway, Schertz.

Virginia — State Dept. of Highways receives bids for 3 bridges. See Roads, Streets and Paving.

Virginia-See Roads, Streets and Paving.

West Virginia—State Road Comsn. receives bids for 3 bridges. See Roads, Streets and Paving.

#### Contracts Awarded

Alabama—Virginia Bridge & Iron Co., Roanoke, Va., has contract for 120 tons struc. steel for bridge requirements in Eto-wah County, of State Highway Comsn., L. G. Smith, Highway Director, Montgomery.

Ky., Owensboro—Spencer County Bridge Comsn., A. H. Kennedy, Brown Trust Co., Rockport, Ind., let contract to Nashville Bridge Co., Nashville, Tenn., for Owensboro-Rockport bridge.

North Carolina—Virginia Bridge & Iron Co., Roanoke, has contract for 190 tons struc. steel for bridge, Gaston County; to Concrete Steel Co., New York, for 100 tons rein. steel; R. H. Blackwell, Gen. Contr., Kingsport, Tenn. (See Roads, Streets and Paving, 4-2.)

Tenn., Knoxville—Following have additional sub-contracts in connection with Hen-

ley St. bridge for City, George R. Dempster, City Mgr.; Lumber, Riverside Lumber Co., 302 W. Front St.; electrical work, Knoxville Electric Co., 411 W. Church Ave., and misc. iron, Virginia Bridge & Iron Co., Roanoke, Va.

#### Canning and Packing Plants

Fla., Vero Beach—Allen Coats, reported, acquired Stuart Bottling Works, Stuart, will move to Vero Beach.

Tex., Brownsville—Chamber of Commerce, G. C. Richardson, Sec., reported, negotiating with outside capitalists for establishment of \$100,000 carrot canning plant.

#### Coal Mines and Coke Ovens

W. Va.. Kingmont—Virginia Pittsburgh Coal and Coke Co., Professional Bldg., Fair-mont, reported, plans \$75,000 coal tipple.

#### Concrete and Cement Plants

La., Alexandria — Alexandria Culvert Co., capital \$50,000. U. B. Evans, Eighth and Scott Sts., J. C. Raxsdale and J. N. Well, Bd. of Directors; begin operation of plant within 45 days.

#### Cotton Compresses and Gins

Ga., Pelham—Holmes Parham, reported, construct gin.

Ga., Pelham—J. L. Pilcher Co., reported, instruct cotton gin.

Ga., Savannah—Southeastern Compress & Warehouse Co., 108 E. Bay St., reported, construct addition to warehouse on Savannah and Atlanta Ry.; 2 buildings with 19 compartments: 1900 ft. long, 100 ft. deep; R. J. Whaley, Inc., 404 E. Bay St., Contrs.; cost \$100,000.

S. C., Greenville—Southeastern Compress and Warehouse Co., Finlay Bridge Road, reported, construct brick and wood warehouse on Cedar Lane Rd, cost \$100,000; facilities for storing 10,000 bales cotton.

#### Drainage, Dredging and Irrigation

D. C., Washington — Arlington Memorial Bridge Comsn., Navy Bldg., let contract to W. P. Thurston Co., P. O. Box 2089, Richmond, Va., for 2000 lin. ft. drain in 5 to 10-ft. trench.

10-ft. trench.

La., Cameron—Gravity Drainage Dist. No.

3, Cameron Parish, John Sells, Pres., votes
June 9 on \$12,000 bonds to construct drainage ditches in and around Cameron; named
F. Shutts & Sons, 921½ Ryan St., Lake
Charles, Engrs.

Tex., Dallas—State Legislature approved
bill authorizing establishment by voters of
Fort Worth and Dallas of Trinity Canal and
Conservation Dist.

Tex. San Renito—Cameron County Water

Conservation Dist.

Tex., San Benito—Cameron County Water Control & Improvement Dist. No. 16 votes June 6 on bonds, \$180,000 for purchasing Rice Tract Irrigation Co., and \$30,000 for constructing additional works.

West Virginia—Norfolk & Western Ry. Co., W. P. Wiltsee, Ch. Engr., Roanoke, Va., applied to U. S. Engr. Office, Huntington, for War Dept. permit to change channel of Guyandotte River, beginning at point 121.7 mi. above its mouth, consisting of cuts and fills in connection with construction of main line of Virginian & Wesern Ry.

#### Electric Light and Power

Electric light and power work in connection with many LAND DEVELOPMENT operations involves the expenditure of large sums of money. See that classification for

D. C., Washington—Potomac Electric Power Co., 10 and E Sts., N. W., reported, construct substation addition 5230 Wiscon-sin Ave., N. W.; 2 story; 39x25 ft.; hollow conc. blocks; struc. steel; slag roof; R. P. Whitty Co., Contr., Denrike Bldg.

Ga., Devereux—Georgia Power Co., Atlanta, reported, construct substation and distribution system.

reported, construct substation and distribution system.

Kentucky—Kentucky Utilities Co., Inc., Louisville, started work on 5500 kv.-a. capacity substation in connection with construction of 33,000 volt transmission line Kentucky-Virginia state line to Lynch to serve the U. S. Coal and Coke Co.'s mining operation, distance of 7½ miles; substation consists of one bank of three 1000 XVA transformers, bank of three 333.3 kv.-a. transformers, bank of three 333.3 kv.-a. transformers, and 3 line bays for 33 kv. circuits, with oil circuit breaker for each circuit; at Harrodsburg a 2300 volt rural line is being extended from distribution system at Kennedy's Bridge to junction of Herrington Lake and Cane Run Creek; at Maysville a 2300 volt feeder circuit from power plant to company's new ice plant will be built and Kentucky Power and Light Co. will install two 30 kv.-a street lighting transformers at power plant; planned to rebuild distribution system at London; at Lexington a single phase 2300 volt primary extension is to be built along the Harrodsburg Pike to South Elkhorn by Lexington Utilities Co.

Md., Baltimore—Roland Electric Co., 418

Md., Baltimore—Roland Electric Co., 418
E. Pratt St., has contract for high tension electric substation for City Hospital, Eastern Ave.: Palmer & Lamden, Archt., 513 N. Charles St.

Miss., Canton—Canton Light and Water Works Comsn., reported, let contract to Henry Watts, for constructing power house build-

Miss., Waynesboro—City. reported, plans electric light plant; cost \$69,500.

Mo., Camdenton—Arthur E. Dunn, Lebanon, filed application with State Public Service Comsn., Jefferson City, for permission to build and operate light and power system at Camdenton, new county seat of Camden County

County.

Mo.. St. Charles—City, W. S. Neal, reported, has preliminary plans in progress for power plant.

Oblehoma Gas & Electric

power plant.

Okla. El Reno—Oklahoma Gas & Electric Co., Oklahoma City, reported, applied for 21 yr. electric light franchise.

Tex., Eagle Pass—Central Power & Light Co., Alamo Natl. Bank Bldg., San Antonio, let contract to Bart Moore, Smith-Young Tower, San Antonio. for general construction for Eagle Pass hydro electric development; contract for turbines let to James Leffel & Co., Springfield, O.; for generators to Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.; Harza Engineering Co., Conslt. Engr., 20 N. Wacker Drive, Chicago, Ill.

Va., Martinsville — City, G. A. Brown, Mayor, has under consideration proposal from General Electric Co., Schenectady, N. Y., for equipment for \$90,000 proposed improvements to light and power plant, and from S. Morgan Smith & Co., for turbine and water wheel and hydraulic equipment.

#### Flour, Feed and Meal Mills

Fla., Bonifay—M. C. Clark, Andalusia, Ala., reported, construct grist mill, later install feed mill and crusher.

Tenn., Athens—Southeastern Mills, Inc., 51-100 Long St., Fritz Long, Sec., construct 40x70 ft. addition; brick; wood floors; asphalt roof; install \$10.000 equipment; A. W. Prather, Contr.; install feed and cereal machinery. See Want Section—Machinery and Supplies.

#### Garages and Filling Stations

Ark., Rison-Temple Oil Co.. Warren, reported, construct filling station.

D. C.. Washington—Bradbury & Mohler. 1608 Crittenden St., N. W., reported, have con-tract for garage and servant's quarters Daniel Rd. and 29th St., for Wm. Montgomry, 5900 Daniels Rd., N. W.; 2 story; frame and rub-ble stone: H. Warren Billings, 15 E. 49 St., New York City, Archt.

D. C., Washington—American Oil Co., American Bldg., Baltimore, Md., reported, con-struct filling station Pennsylvania Ave. and 9 St., N. W.; brick; cost \$15,000.

D. C., Washington—Greyhound Management Corp., 1336 New York Ave., N. W., reported, received low bid from Skinker & Garrett, 1719 I St., N. W., for service building foot of Capitol St.; 1 story; brick and conc.; 115x300 ft.; slag roof; cost \$150,000.

Fla., Coral Gables—Samuel Wiessel, 808 Alhambra Circle, reported, construct service station, S. W. Cor. Ponce de Leon Blvd. and Coral Way; Paist & Steward, Archts., Art Center Bldg.

Fla., Inverness—Sinclair Oil Co. will oc-py building Pine and Main Sts. to be ected by Claude Connor; brick, tile and cupy o

stucco.

Fla., Miami—Goodrich Silvertown, Inc., Akron, O., receives bids May 20 for demolition of present structures now on property and construction of 2 story service station Biscayne Blyd. & 7 St.; conc. and brick; struct. steel and misc. iron; steel sash and store fronts; Rudd water heaters; estimated cost \$50,000; following estimating: Gunn & Coil, Inc., 69 N. E. 38 St., M. R. Harrison Constr. Co., 500 N. E. 45 St., J. Y. Gooch & Co., Bedford Bldg., N. E. 1 St., Geo. W. Langford, McAllister Hotel Bldg., G. Henry Hunt, Inc., 1633 S. W. 9 St., all Miami; O'Neill-Orr Construction Co., 604 5 St., Miami Beach.

Ga. Atlanta—Griffin Construction Co., 452

Ga., Atlanta—Griffin Construction Co., 452 pring St., reported, has contract for filling station 411 Peters St.; cinder block walls; 1 story; 22x12 ft.

1 story; 22x12 ft.
Ga., Macon—M. R. Fried, 352 Broadway, reported, erect garage and service station; cost \$18,000; W. Elliott Dunwoody, Jr., Archt., 460 Broadway; W. A. Stillwell & Sons, Contr., Grand Bidg.

La., West Monroe—J. M. Salley and F. L. Russell, West Monroe, reported, have contract for service station Trenton and Pine Sts.; brick and frame; 55x65 ft.; Love & Barr, Archts., Monroe.

brick and frame; 59309 It., 1000 & Dat., Archts., Monroe.

Md., Baltimore—Michael Bauer, 7509 Harford Rd., reported, will have plans ready for bids June 1 for gasoline station and four 1000-gal. tanks; brick; 1 story; Porter T. Bond, Archt., 911 Gorsuch Ave.

4-30

Md. Paltimora—Milton G. Lerch, 5206 Har-

Bond, Archt., 911 Gorsuch Ave. 4-30
Md. Baltimore—Milton G. Lerch, 5206 Harford Rd., will probably take sub bids in fall on 14 garages 5240 Harford Rd.; conc. block; 1 story; 10x20 ft. each; owner builder.
Md., Baltimore—Charles J. Meister, 2601
Pennsylvania Ave., construct garage, probably begin work in Sept.; 1 story; brick; 160x146 ft.; following contractors estimating, date of opening bids not set: Charles H. Henkel, 2740 Edmondson Ave.; Avon Construction Co., 218 E. Lexington St.; B. F. Bennett Building Co., 123 S. Howard St.; Wm. Ganter & Associates, Archts., Knickerbocker Bidg.
Md., Baltimore—Louis A. Mueller, 3304
Barclay St., reported, construct filling station and office, 1 story, brick.
Md., Plkesville, Baltimore—B. H. B. Ennis,

and omce, 1 story, brick.

Md., Pikesville, Baltimore—B. H. B. Ennis, 1933 E. 31st St., Baltimore, has contract for filling station for Sherwood Bros., Baltimore Trust Bldg., Baltimore.

Mo., Kansas City—Kansas City Terminal Cab Co., incorporated; L. H. Borserine, Jr., 4415 Holly St.

Mo., St. Joseph—Lawler-Grant Motor Co. construct gasoline filling station, Tenth and Francis Sts.

N. C., Burgaw—Holland Motor Co., capital \$60,000, incorporated; R. H. Holland, E. G. Paddison.

S. C., Spartanburg—Carolina Mfg. Co., incorporated; J. H. Daniel, B. R. Tucker; manufacture neckwear.
S. C., Spartanburg—R. E. Foil & Co., incorporated; R. E. Foil, 149 Morgan Ave.

T ex., Dalhart—Stewart Motor Co., capital 5,000. incorporated; Victor L. Stewart, J. Figh.

Tex., Laredo — Jos. A. Morgan & Sons, Milam Bldg., San Antonio, reported, low bid-der at \$39,990 for sales and service garage building, Gateway Chevrolet Co., lessee. 5-7

#### Gas and Oil Enterprises

Fla., Miami—Cuban-Miami Oil & Gas Co., incorporated; W. G. Blanchard, 271 E. Flagler St.

Ky.. Bloomfield—Hiland Petroleum Co., capital \$60,000, incorporated; J. H. Crites, S. H. Miller.

Ky., Hazard—Kengreen Utilities Co., 2131 N. Hall St., St. Louis, Mo., reported supply natural gas; install mains from gas field in Perry County.

Ky., Manchester—Peoples' State Gas Co. will supply gas to city; now supplying gas to Barbourville, Irvine, London, etc.

Ky., Owensboro—Consoer, Older & Quinlan, Inc., Engrs., 205 W. Wacker Drive, Chicago, Ill., reported, filed proposal with city officials for preliminary survey for gas distribution system and study and analysis of financial statements, meter record, operation and maintenance of Owensboro Gas Co. 3-5

Ky., Pineville—Distel-Martin Gas Co., Bar-boursville, reported, acquired gas franchise at Pineville, Middleboro and Harlan; con-struct 6-in. line from local fields to Pine-

Mo., Higginsville—City votes June 2 on \$55,000 natural gas distribution system bonds.

Mo., Joplin—Joplin Royalty & Development Co., incorporated; George W. Moore, 312 Wall St.

Mo. Palmyra—Central States Gas Utilities Co., 101 W. 11 St., Kansas City, plans distribution plant served by line from Quincy lateral; erect regulator station house; work by company's forces; J. Sanley Stevenson, Constr. Engr., 101 W. 11 St., Kansas Ciy.

N. C., Greensboro—Suburban Gas and Equipment Co., capital \$50.000, incorporated; F. W. Forster, Greensboro Bank & Trust

Okla., Carney—City, reported, granted gas franchise to Pact Gas Co.

Okla., Guthrie—Western Service Corp., Braniff Bldg., Oklahoma City, reported, let contract to Benson & Henderson Pipe Line Construction Co., Guthrie and Oklahoma City, at \$227,000 for installation gas distribution system; distance 45 miles.

Okla. Germies M. and M. G. Christon College Company of the College M. and M. G. Christon M. and M.

Okla., Okmulgee—M. and M. Oil and Gas orp., capital \$30.000, incorporated; F. R. yer, 1335 E. Eighth St.

Okla., Vinita—City votes June 16 on granting 10 yr. franchise renewal to Vinita Fuel Co.

S. C., Charleston—Condon Oil Co., capital \$15,000, incorporated; James F. Condon, 431 King St.

SLO,000, incorporated; James F. Condon, 431
King St.

Texas—Moody Seagraves Producing Co., Esperson Bldg., Houston. reported, acquired holdings of Saxet Co., Esperson Bldg., Houston, in South Texas: will operate under name Saxet Co., O. R. Seagraves, Chrm. Bd. of Directors; holdings involve production of approx. 10,000 bbls. daily.

Texas—Sun Pipeline Co., Philadelphia, Pa., and Yount-Lee Pipeline Co., San Jacinto Life Bldg., Beaumont. reported, construct \$2.500,000 pipe line to carry oil from 3 East Texas oil fields to tidewater at Beaumont; surveys under way and right of way being purchased; loin, double bell nipple are welded line with laterals of 8, 6 and 4-in. pipe, distance of 200 miles; plans include 2 pumping stations Gregg and Rusk county; line will run from Beaumont to Sour Lake to northern end of east Texas field.

Texas—Texas Oil Co. of Texas, Petroleum

east Texas neid.

Texas—Texas Oil Co. of Texas, Petroleum Bldg., advises recent report of contemplated work erroneous; do not contemplate any further improvements at plant at Viola now.

5-14

Tex., Amarillo—City rejected bids for distribution system for natural gas. 4-2

Tex., Dallas—Joiner Petroleum Corp. of exas, incorporated; C. M. Joiner, Marvin

Bidg.

Tex., Fort Stockton—Big Bend Pipeline Co., reported, started work on laying main gas pipe line from wells 22 miles north of city to city's limits; high pressure line will be connected with Pecos Valley wells; will be extended to Alpine and Marfa, supplying distribution system to be installed in both towns.

Tex., Fort Worth—Shamrock Natural Gas Co., Amarillo Bldg., Amarillo, reported, nego-tiating with city for gas franchise, subject to vote May 27.

vote May 27.

Tex., Houston—Republic Production Co.,
Petroleum Bldg., reported, acquired site in
Harrisburg, for plant.

Tex., Laredo—Fairway Production Co.,
capital \$20,000, incorporated; John G. Morris, H. K. Bateman.

Tex., Overton—Majestic Oil and Gas Co., incorporated; H. M. Hill, Charles Kellum.

Tex., Palestine—International-Great Northern R. R. Co., reported, construct 10,000 gal. capacity gasoline tank.

capacity gasoline tank.

Tex., Rio Grande City—Rio Grande Public Service Co., 709 Maverick Bldg., San Antonio, Terry A. Hornaday, Pres., construction with company's forces, plant at Rio Grande City and 20.5 pipe line and distributing system; cost of building \$40,000 to \$50,000, of equipment \$40,000 to \$50,000; contract for machinery let to Greenspon Iron & Steel Co., St. Louis, Mo.; Linde Air Products, San Antonio; Metric Metal, Erie, Pa., and Westcott & Greis, Inc., Magnolia Bldg., Dallas.

5-14

#### Ice and Cold-Storage Plants

Tex., Hillsboro—W. S. Grimes and W. D. Little, Hillsboro and Fort Worth, reported, construct 60 ton ice plant on Elm St.; cost \$50,000.

#### Land Development

D. C., Washington—Northwest Cemetery Co., Tower Bldg., B. D. Strowhecker, V. P., and Sec., develop cemetery in nearby Maryland on Ridge Rd. near Takhoma Park and Silver Springs; will be called Washington Memorial Park; 98 acres; construct chimes tower, 137 ft. high and chapel containing organ and chimes control.

Fla., Jacksonville—F. & F. Realty Co., incorporated; M. Feldman, 1601 Post St.

Ky., Ashland-Tri-State Realty Co., incorporated: H. S. Howes, H. M. Lewis.

La., Bastrop—Kiwanis Club, Dr. W. A. Rodgers, Pres., interested in development of park and playground.

Mo., New Madrid—Alluvia Land Co., incorporated; S. L. Hunter, A. O. Allen.

Mo., St. Louis—J-D Real Estate Co., in-corporated; John G. Burdeau, 4921a Coti Brilliante.

Mo., St. Louis—Stadium Real Estate Co., incorporated; Gustav W. Sturnfels, 4529 Tower Grove Place.

Mo. Versailles—Sunrise Beach Development Co., Phil A. Bennett, Pres., will incorporate with \$35,000 authorized capital; has 350 acres, develop 100 acres now for resort; open develop 100 acres now for resort; open streets; drill well; water system; sewer sys-tem; construct club house; cottages, etc.; J. David Hammel, Springfield, Landscape Archt.

N. C., Charlotte—Queen Realty Co., capital \$50,000, incorporated; P. C. Whitlock, Law Bldg.

N. C., Gastonia—Marvin Real Estate Corp., capital \$100,000. incorporated; Geo. E. Mar-vin, Geo. H. Martin.

S. C., Charleston—George C. Birlant & Co., incorporated; George C. Birlant, 67 Broad St.

#### Lumber Enterprises

Miss., Ripley—Hickson Bros., reported, establish stave mill.

N. C., Wilmington—L. A. Long, reported, operate juniper shingle mill on Carolina Beach Rd.

W. Va., Allingdale—Ely-Thomas Lumber Co., capital \$150,000, incorporated; Guy Ross, Buckhannon; Wellington Thomas, Shelby-ville.

#### Mining

Ga., Aubrey—Manganese Corporation of America, White, advises at present time do not contemplate making any improvements at mines.

Ky., Hopkinsville—Hopkinsville Stone Co., A. M. Andrew, Sec., increased capital to \$50,000; opening a new crushing plant.

La., Alexandria—Bateman Construction Co., 906 Guaranty Bank Bldg., reported, acquired gravel pit about 4 miles from Pineville; will install modern sand and gravel washing and screening machinery; 100 tons daily producing capacity.

Mo., St. Joseph—St. Joseph Quarries Co., E. H. Lawhon, Pres., 505 Main St., develop quarry north of Karnes Rd., tract of 25 acres.

ores.

Okla., Miami—Velvet Mining Corp., incorporated; W. J. Richards, Baxter Springs, Kans.; C. M. Davidson, Miami.

Tex., Fredericksburg—G. W. Land, University of Chicago, and Henry Noll, and R. L. Schmerbeck. Kerrville, Tex., reported, secured mineral rights on 3000 acres lands with deposits of long fiber, high grade asbestos; will probably construct mill.

#### Miscellaneous Construction

Ala., Birmingham—Roberts Electric Co. has contract for electric wiring in passenger and baggage subways at station of Louisville & Nashville R. R. Co., Edward B. Wise, Jr., Engr., Louisville, Ky.; A. J. Honeycutt. Gen. Contr., 2512 N. Eighth St.

Arkansas—See Vicksburg, Miss.
Fla., Jacksonville—City, Bradley Kennelly,
Supt. of Docks and Terminals, authorized by
City Comsn. to call for bids for new turpentine storage tanks at municipal docks of
5000, 6000 and 7000-bbl. capacity.

Ga., Augusta—City, W. H. Wise, City Engr., completing plans for \$75,000 levee re-pair project. 5-7

Louisiana—U. S. Engr. Office, foot of Prytania St., New Orleans, let contracts for earthwork: Lower Tensas Levee Dist., 665.000 cu. yd., Valley Construction Co., Newellton, \$102,277; Atchafalaya Front and Pontchartrain Levee Dist., J. H. Boyce Sons & Co. and Roy L. Igo. 255 Hawthorn St., Memphis, Tenn., jointly, \$406,952; Louisians, Fourche. Pontchartrain and Lake Borgne Levee Districts, Lower Coast Construction Co., Ltd., and Highways Construction Co., 418 Godchaux Bldg., New Orleans, \$385,550.

Louisiana-See Vicksburg, Miss.

La., Harvey—U. S. Engr. Office, First New Orleans Dist., Poland and Dauphine St., New Orleans, let contract to C. F. Lytle, Sioux City, Ia., at \$668,216, for lock. 4-16

La., Lake Charles—Bd. of Commrs., Lake Charles Harbor and Terminal Dist., Elmer E. Shutts, Engr., P. O. Box 665, opens bids June 16 for additional docks and warehouses. 5-14

La., Natchitoches—U. S. Bureau of Fisheries, Washington, D. C., advises plans not drawn for \$40,000 fish hatchery. 5-14

La., New Orleans—U. S. Engr. Office, foot of Prytania St. has bid of 15.45 cents per cu. yd. (only bid received) for constructing approx. 6000 cu. yd. earthwork, Bordelonville-Hamburg Levee (extension) Second New Orleans Dist.

La., New Orleans—Bd. of Commrs. of Port of New Orleans, 200 New Courthouse Bldg., has low bid from Blattmann-Weeser Sheet Metal Works, Inc., 1001 Toulouse St., at \$7.44 per square (100 sq. ft.), for sheet metal draft stops at 61 locations in various sheds along riverfront and Industrial Canal wharves along wharves.

Md. Baltimore—City, Buildings Engineer, Municipal Bldg., opens bids May 27 for repairs to Broadway Pier, consisting of resurfacing roof deck; following estimating on general contract: E. J. Wunder, 4312 Belview Ave.; Wallis Co., 2218 Pennsylvania Ave.; C. W. Schmidt. Hearst Tower Bldg.; H. L. Maas & Son, 1119 Ensor St.; C. H. Henkel, 2740 Edmondson Ave.

Md., Curtis Bay, Baltimore — Treasury Dept., Coast Guard Service, Washington, D. C., has low bid from C. W. Schmidt, Hearst Tower Bldg., at \$45,987, for superstructure for boat shop.

C., has low bid from C. W. Schmidt, Hearst Tower Bldg.. at \$45,987, for superstructure for boat shop.

Miss., Vicksburg—U. S. Engr. Office, P. O. Box 667, opens bids June 10 for constructing approx. 13,388,000 cu. yd. earthwork, east and west banks Mississippi River, Miss., Ark., and La., designated as follows by name, item number, miles below Cairo, location, kind of work, length, estimated cu. yd., average height: Ashbrook to Tarpley Enlargement, Sec. 3, 858L, 458L, 10 mi. north of Greenville, Miss., reverside enlargement, 9114 ft., 458,000, 27; Above Greenville Setback, 477LA, 477LB, 477LPC, and 477L-D, all 477L, 2 mi. north of Greenville, Miss., new levee, 8586, 7500, 5800 and 5616 ft., 1,147,700, 1,120,100, 1,137300 and 960,900, 23, 23, 26 and 25 ft.; Deerfield to Wayside, Miss., riverside enlargement, 9341.4 ft., 513,800, 30 ft.; West Bank of Mississippi River in Arkansas, 488R-A and 488R-B, 488R and 488.5R, 8 ml. east of Lake Village, Ark., riverside enlargement and land-slide enlargement and berm, 2413 and 4133 ft., 134,600 and 687,800, 26 and 29 ft.; Vaucluse to Sunnyside Setback, 490R-A and 490R-B, both 490R, 10 ml. from Lake Village, Ark., new levee, 8767 and 8055.6 feet, 543,900 and 545,600, both 18.5 ft.; Greenville, Miss., enlargement, 5700 ft., 33,000, 25 ft.; Refuge, 9, 492L, 8 ml. south of Greenville, new levee, 3584 ft., 138,400, 21 ft.; Deerfield Setback, 11-A, 11-B and 11-C, all 494L, 2 ml. west of Wayside, Miss., new levee, 6940, 6000 and 4902 ft.; Sunnyside Setback, 493R-A and 493R-B, both 493R, 9 ml. southeast of Lake Village, Ark., 5768.4 and 6258 ft., 582,900 and 590, 200, 22 and 21 ft.; Sunnyside to Seven Oaks, 197R-A and 497R-B, both 497R, 12 ml. southeast of Lake Village, Ark., 5768.4 and 6258 ft., 582,900 and 590, 500, 22 and 21 ft.; Sunnyside to Seven Oaks, 197R-A and 497R-B, both 497R, 12 ml. southeast of Lake Village, Ark., riverside enlargement on second, 13,310 and 15,694 ft.
173,500 and 926,800, 20 and 24 ft.; West Bank of Mississippi River in Louisiana—Reid-Bedford, 609R, 609

La., new levee, 5985.8 11., 500,600, Mo., Jefferson City—U. S. Engr. Office, Postal Telegraph Bldg., Kansas City, let contract to E. L. McCain, 421 Crockett St., Shreveport, La., at \$46.707, for 2400 lin. ft. standard revetment, Missouri River, Murrays Bend. 4-30

Mo., Kansas City—Kansas City Southern Ry. Co., W. N. Dermus, Gen. Mgr., add 600,000 bu. to present capacity of elevator in Northeast Industrial Dist.; construction to

start at once and be complete in about 90 days; Moore-Seaver Grain Co., Lessee. 4-23

Mo., St. Louis—U. S. Engr. Office, Custom House, has low bid from Woods Bros. Construction Co., Lincoln, Neb., at \$45,202, for constructing 1250 to 2250 lin. ft. piling dikes.

Mo., St. Louis—City, Bd. of Public Service, City Hall opens bids June 2 for pedestrian underpass, 12th Blvd., south of Market St., Letting 4246.

S. C., Charleston—Navy Dept., Bureau of Yards and Docks, Washington, D. C., re-ported, soon start constructing \$150,000 de-stroyer building ways.

stroyer building ways.

Texas — Following firms erecting grain elevators on new lines of Atchison, Topeka & Santa Fe Ry., Boise City to Spearman, all to be completed in time to handle 1931 wheat crop: Kearns Grain Co., Amarillo, at Cordaro, Satren, Mallett, Bautista and Frick; Hilker Grain Co., at Frick; Wadley Grain Co., Texhoma, at Kerrick; Connally Grain Co., Amarillo, at Dumas; Strader Grain Co., Amarillo, at Dumas; Beasley Grain Co., Amarillo, at Dumas; Beasley Grain Co., Amarillo, at Dumas and Machovec; Roberts Grain Co., Amarillo, at Etter; Johnson Grain Co., Enid, Okla., and Collard Grain Co., Spearman, Tex., at McGibben.

Tex., Amarillo—Burrus Panhandle Elevators, J. Perry Burrus, Pres., 2701 Alamo St., Dallas, erect 500,000-bu. third unit to grain elevator; 200 ft. long, 100 ft. high; completing first and second units, with own forces; S. F. Hoehn, Constr. Supt. 3-19

Tex., Fort Worth—Lone Star Elevator Co., Walter Lucine, has foundation complete for \$35,000, rein. conc. grain elevator, 2000 S. Main St. 2-19

Tex., Houston City—J. Russell Wait, Port Director, opens bids June 14 for reconstructing city dock No. 11, costing approx. \$135,000; remove present pilings and substitute rein. conc. pilings: change general structure of dock for handling general commodities as well as cotton.

Tex., Randolph Field—Office of Constructing Quartermaster has low bid from Kenneth L. Colborn, 385 E. Green St., Pasadena, Calif., for 5-ton incinerator. 5-7

Va., Richmond—City, R. Keith Compton, Dir. Public Works. let contract to A. H. Calligan & Co., Builders Exch., for addition to city wharf, at \$55,117.

W. Va., Leetown—U. S. Bureau of Fisheries advises plans drawn for \$35,000 fish hatchery but no bids have been called for; J. B. Southall, Engr., Charles Town.

W. Va., London—Chief of Engineers, War Dept., Washington, approved contract to Northport Sand & Gravel Co., John L. Walsh, Northport, N. Y., for constructing lock in Kanawha River; starting construc-tion.

#### Miscellaneous Enterprises

Ark., Harrison—Harrison Packing Co., reported, plans construction of slaughter house.

D. C., Washington—Capitol Fireproof Products Corp., reported, has contract for 120 tons rein. steel for National Capital Press Bldg., 1210 D St., N. W.

D. C., Washington—Stofflet & Tillotson, 605
Wesley Building, Philadelphia, Pa., general
contractor for National Hydraulic Laboratory
building on grounds of Bureau, will let contract to Continental Contracting Co., Fort
Dodge, Iowa, for heat and power service
ducts and installation of electric power and
steam lines; George K. Burgess, Director,
Bureau of Standards, Dept. of Commerce. 5-7

Fla., Tampa—Celo Co. of America, Dr. R. A. Thorne, Sr., Pres., Polk and Pierce Sts., reported, acquired 4 story building Zack and Pierce Sts., for national headquarters; install new equipment for manufacture of syrups and extracts; present building at Polk and Pierce St., will be remodeled for increase in bottling facilities.

Fla., Tampa—Arro-Lin Laboratories, Inc., chartered; D. E. Powell, 606 Magnolia Ave.

Ky., Corbin—Warren Carver, Engr., reported, interested in establishment of broom and brush plant.

La., New Orleans — Loose-Willes Biscuit Co., 811 Commerce Bldg., Kansas City, Mo., reported, acquired plant of Consumers Bis-cuit Co.

Md., Baltimore—Citrus Products Co., in-corporated; Benj. C. Howard, Jr., First Natl. Bank Bldg.

Md., Cumberland—Laughlin Co., 802 Lafayette Ave., capital \$25,000, incorporated; Richard M. Laughlin, Res. Agt.; heating equipment.

equipment.

Md., Darlington—W. T. Bailey, Churchville, reported, low bidder on buildings at Indian Springs Farm, for Donald Symington, Baltimore Trust Bldg., Baltimore; W. S. Austin, Conslt. Engr., Maryland Trust Bldg., Baltimore.

4-16

more.

Mo., Bonne Terre—Cal-Sun Co., Inc., chartered; Harry Francis, J. R. Felty, manufacture liquid shampoo.

Mo., Pierce City—Ozark Casket Co., reported, plans casket plant; 1 story and basement; 50x100 ft. with wing extension 25x80 ft.; cost \$25,000; George F. Reed, Archt., Woodruff Bldg., Springfield.

Mo., St. Louis—W. A. Studt Bakers & Confectioners Supply Co., incorporated; W. A. W. A. Studt, 6204 S. Kingshighway.

Mo. St. Louis—Memorial Meuscleum, Inc.

, St. Louis—Memorial Mausoleum, Inc., red; Wm. F. Brockmeyer, 4114 Minne-

Mo., St. Louis—Multi-Color Sign Co., in-corporated; Fred W. Scheller, Kirkwood.

Okla., Sallisaw—Southwestern Syrup & Canning Co., incorporated; C. B. Frix, W. B. Wall.

Wall.

Tenn., Nashville—Jarman Shoe Co., Gallatin Ave., let contract to Foster & Craighton Co., 4th & 1st Bldg., Nashville, at \$45,000, for addition to shoe plant; brick; wood foors; install \$20,000 equipment; daily output 9000 prs.

The Property of the Contract of the

Tex., Beaumont — Christy-Dolph-Collins Construction Co., Goodhue Bldg., Beaumont, reported, low bidder for building for Beaumont Coca Cola Bottling Co., at Mariposa and Ashley Sts., cost \$150,000.

and Ashley Sts., cost \$150,000. 4-30

Tex., Houston—S. E. Duthit, 1202 Gabella
St., reported, has contract for dye plant for
Fisher Dye Works at 2108 Jefferson Ave.;
1-story; 40x91 ft.; tile with brick trim; tar
and gravel roof; steel sash; R. D. Steele,
Archt., First Natl. Bank Bldg.

Tex., Houston—P. H. Frederick, reported,
has contract for 1 story, laundry at 2716
Canal St., for Gould Laundry; 30x60 ft.;
conc. brick and tile; C. N. Nelson, Archt.,
Bing Bldg.

Tex., Waco—Nash Robinson & Co., 1600

Tex., Waco—Nash Robinson & Co., 1600
Franklin Ave., will rebuild burned sheds and
warehouse; warehouse, 70x350 ft.; sheds, 650
x30 ft.; frame and iron sides and roof;
yellow pine or maple floor; 28 gauge galv.
iron; cost \$25,000; will use local labor; expect to start work in 2 or 3 weeks; install
electric or hydraulic elevator. See Want
Section—Machinery and Supplies.

Yendowickshawr Supplies.

4-30

pect to start work in 2 or 3 weeks; install electric or hydraulic elevator. See Want Section—Machinery and Supplies. 4-30
Va., Fredericksburg—Sylvania Industrial Corp., H. H. Replogle, V. P., 122 E 42 St., New York, will erect 3 new buildings as \$1,-000,000 addition to "Sylphrap" manufacturing plant near Fredericksburg, in accordance with plans and specifications prepared by The Ballinger Co., Archts. and Engrs., 12th and Chestnut Sts., Philadelphia, Pa., and New York; new building will be partly one and 2 stories; roof construction of struc. steel with plank roof sheathing and tarred felt and slag roof covering with sawtooth skylights; cork insulation will be applied on roof sheathing to avoid heat loss and prevent condensation; walls will be of brick with stone trimmings, rolled steel windows with ventilating sections; floors of cement or asphalt; plumbing, heating, electrical and sprinkler equipment will be installed; bids have been invited; due May 27 at Philadelphia office of The Ballinger Co., from general contractors as follows: Hughes-Foulkrod Co., Schaff Bidg., Philadelphia, Pa.; John P. Pettyjohn & Co., 212 Eighth St., Lynchburg, Va.; J. B. Ferguson & Co., 39 W. Washington St., Hagerstown, Md.; Allen J. Saville, Inc., Electric Bidg., Richmond; Chas. H. Tompkins Co., 1608 Kst., N. W., Washington, D. C.; Consolidated Engineering Co., St. Paul and Franklin Sts., Baltimore, Md.; Newport Contracting & Eng. Co., Lee Hall; Claiborne & Taylor, Inc., Eroad Grace Arcade Bldg., Richmond; John W. Cowper Co., Inc., State Planters Bank Bldg., Richmond.

Va., Glouscester — Tidewater General Insurance Co., Inc., capital \$25,000, chartered; Peter H. Harrison.

Va., Hopewell—Hopewell Newspaper Corp., capital \$25,000 incorporated; H. F. Minter, George Ware Webster; publish semi-weekly paper.

Va., Lawrenceville — Brinswick Packing Co., incorporated; Wm. W. Gayle.
Va., Fredericksburg—Collins Flashlight Corp. of Virginia, capital \$1,000,000, incorporated; Cap Bertrans Collins, Takoma Park, Md.

Va., Roanoke - Times World Corp., in-

creased maximum authorized capital stock from \$500,000 to \$1,000,000.

Va., Winchester—B. & C. Baking Corp., capital \$50,000, incorporated; J. Clayton Cochran, C. Douglas Brown.

#### Motor Bus Lines and Terminals

Ala., Andalusia—White Eagle Transit Line, will have hearing May 22 in Montgomery, by Public Service Comsn., on application for authority to extend motor freight line from Andalusia, via Opp. Samson and Hartford.

Md., Baltimore—Weiss Motor Lines, Inc., chartered; Frederick Weiss, 605 Fallsway. Mo., Jefferson City—Missouri Pacific Trans-ritation Co. granted permission by Public erivce Co. to operate buses between Jef-

ferson City and Bagnell Dam.

Tex., Nacogdoches—Airline Motor Coach Co., reported, acquired Fite and Wallace Bus Line, operating between Nacogdoches and Longylaw Line, operating Longview.

Va., Lexington—Southern Freight and Passenger Motor Line, applied to State Corp. Comsn. for permission to operate 3 buses from Lexington to Richmond.

Va., Richmond—State Corp. Comsn., reported, granted permission to Barnard Bus Line to operate over route, between Richmond and Lynchburg, via Cumbrland and Buckingham mond and L Buckingham.

Va., Staunton — Shenandoah Transit Co., ic., capital \$25,000, incorporated; John H.

#### Railways

Mo., St. Louis—St. Louis Southwestern Ry. Co., D. Upthegrove, Pres., applied to Interstate Commerce Comsn., Washington, for permission to issue \$1,116,000 first terminal and unification mortgage bonds.

west Virginia—Virginian Ry. Co., A. M. Traugott, Ch. Engr., Norfolk, Va., opens bids May 27 for sub-grade (except superstructure for steel bridges) of Sec. F. part of Guyandot River Line, Mile Post 33.0 to Mile Post 39.38, Wyoming and Mingo Counties; includes 3 tunnels, substructures for 2 river bridges, and channel changes.

tunnets, substructures for 2 river bridges, and channel changes.

W. Va., Fort Spring—Chesapeake & Ohio Ry. Co., C. W. Johns, Ch. Engr., Richmond, Va., recently let contract to Boxley Bros. Co., Inc., Orange, Va., for new double track Second Creek tunnel and bridge over Greenbrier River on revised alignment; also new single track tunnel to parallel Mann's tunnel, total est. cost \$1.564,500; revision will extend from Rockland Station westwardly approx. 1.5 ml. to point about 1.5 ml. east of here; Second Creek tunnel 2160 ft. long, 32 ft. wide x 22 ft. high above top of rail; conc. lined, tracks through tunnel to be laid on ballast supported by conc. floor slab and ballast walls; bridge 500 ft. long with 14-ft. track centers, ballast deck steel girder type, 5 100-ft. spans; new Mann's tunnel to be 1060 ft. long, 18 ft. wide x 22 ft. high above top of rail, conc. lined; track through tunnel to be laid on ballast supported by conc. floor slab and ballast walls.

Roads Streets and Dovice.

#### Roads, Streets and Paving

In connection with LAND DEVELOP-MENT large sums are expended for roads, streets, paving and sidewalks. Details will be found under that classification.

Ala., Montgomery—City Comsn. adopted ordinance to widen by 6 ft. north side of Madison Ave., Panama to Saffold St., including curbing and guttering.

D. C., Washington—District Commrs., Dist. Bldg., ordered widening Constitution Ave., between 14th St. and Virginia Ave., N. W., to 80 ft., costing \$168,500.

to 80 ft., costing \$168,500. Florida—State Road Dept., Robt. W. Bentley, Chmn., Tallahassee, let contract to J. E. Ballinger Construction Co., Lakeland, at \$13,-228, for approaches to Dunn's Creek bridge, Proj. 952, Road 3, Putnam County.

Fla., Sebastian—City Council, Lenora K. Park, City Clk., opens bids June 8 for approx. 38,000 sq. yd. oiling paved streets.

Ga., Sparta—City has preliminary plans for approx. 12.000 sq. yd. paving, grading, storm sewers; O. H. Lang, Conslt. Engr.

storm sewers: O. H. Lang, Consit. Engr.

KENTUCKY—State Highway Comsn., H.

D. Palmore, Engr., Frankofrt, opens bids
June 10 for 3 roads and brige in following
counties:

Bath—curb and gutter and valley gutter
through town of Sharpsburg, Fields Highway, approx. 6968 ft. conc. curb and gutter, 205 valley gutter;
Fleming—0.9 mi. surfacing, Fields Highway through Flemingsburg, beginning at

south city limit and extending to north city limit:

city limit;

Metcalfe 4.300 mi. grading, draining, Edmonton-Tompkinsville road. end of graded road near Missionary Mount Church to intersection with Glasgow-Burkesville road;
Nicholas-bridge and overhead at Scrub Grass Creek, 1 mi. west of Myers Station, Carlisle-Flemingsburg road, 100-ft. steel span; 4 34-ft. rein. conc. deck girder spans, rein. conc. piers and abutments; separate bids to be received as follows: 1, steel span, 2, conc. spans, piers and abutments.

Ky., Louisville—City, Dept. of Works, let contracts May 25 for 12 street projects to cost approx. \$30,000.

La. Bastrop—Morehouse Parish Police Jury

La., Bastrop—Morehouse Parish Police Jury opens bids June 2 for graveling roads.

La., Lake Providence—City, Mayor and Bd. of Aldermen, opens bids May 26 for paving Lake St.; J. M. Fourmy, Engr., Hammond.

MARYLAND—State Roads Comsn., L. H. Steuart, Sec., Baltimore, opens bids May 26 for 5 roads in following counties:

Charles—2.1 mi. gravel, LaPlata-Dentsville road toward Bryantown, Ch-103-84;

Carroll—8.26 mi. conc. shoulders, Liberty road, Eldersburg to Taylorsville, Cl-97-511, FAP 237;

Carroll—8.26 mi. conc. Shousers, 202-51, road, Eldersburg to Taylorsville, Cl-97-511, FAP 237;
Harford—2.94 mi. macad., Shipley's Corner on Philadelphia road to Magnolia, H-120-44;
Washington—3.20 mi. macad., Dry Run to Farview, 2.03 mi., and Dry Run toward National Pike, 1.17 mi., W-91-62;
Somerset—0.55 bl. macad. resurfacing, Maryland Ave. to McCready Hospital, S-50-14.

MARYLAND—State Road Comsn., L. Steuart, Sec., Baltimore, has low bids for

Baltimore City—0.37 ml. sheet asphalt, Cold pring Lane, Bc-104-74, P. Flanigan & Sons, 5th St. and Harford road, Baltimore, \$35,-

20th St. and Harford road, Baltimore, \$35,-661;
Dorchester County—1.2 mi. conc., Beckwith Neck road, D-80-12, Aiello Construction Co., Gough and Dean Sts., \$21,765;
Garrett County—2.56 mi. macad.. Bittinger-Grantsville road, G-50-64, Thomas, Bennett & Hunter, Westminster, \$97,970:
Prince George's County—3.42 mi. conc., Chillum road and University Dr., P-169-32, L. R. Culbert, Fredericksburg, Va., \$66,888; Queen Anne's County—1.50 mi. conc. with slag shoulders. Queen Anne-Starr road toward Ruthsburg, Q-67-22, Hanniman Burroughs Co., Salisbury, \$18,875;
Worcester County—0.74 mi. conc. roadway and timber bridge, Berlin-Lewis road, Wo-100-12, P. D. Phillips & Bro., Salisbury, \$27,881.
Md., Baltimore—City, Nathan L. Smith.

Md., Baltimore—City, Nathan L. Smith, Highways Engr., has low bid from Aiello Construction Co., 3700 Gough St., at \$17,174, for Cont. 597, 9300 sq. yd. cement conc. paving.

for Cont. 597, 9300 sq. yd. cement conc. paving.

Md. Silver Spring—Maryland National Capital Park & Planning Comsn., Irving C. Root, Ch. Engr., call for bids in few days for paving Beach Dr., first road link in Maryland extension of Rock Creek Park from District line to East-West Highway, 1.2 mi, 20,000 sq. yd. paving; alternates on 30-ft. asphaltmacad. with conc. shoulders, or 30-ft. conc., with asphalt emulsion cure.

Mississippi—State Highway Comsn., C. M. Williamson. Director, Jackson, opens bids May 25 for 3.75 mi., Collins-Magee road, vicinity of Mt. Olive, Covington County, FAP 200-F& 165 Reop., 22,000 cu. yd. embankment jetted (hydraulic, 22,750 cu. yd. excavation, 1000 cu. yd. barrow excavation, 61,615 lb. rein. steel; paving items—alternates—43,768 sq. yd. cement conc. (plain), or 41,580 sq. yd. sheet asphalt and 43,768 sq. yd. sheet asphalt, rock asphalt or asphaltic conc. surface course and 43,768 sq. yd. asphalt conc. surface course; bridge items, 13,000 lb. rein. steel, 1100 lin. ft. untreated piling.

Miss., Holly Springs—Marshall County Supvrs., J. T. Wade, Clk., opens bids June 2 for 52,000 cu. yd. earth excavation, for graveling 8 mi. Red Banks Separate Road Dist.; separate bids for 9000 cu. yd. gravel; S. W. McClesky, Engr., 63 S. Third St., Memphis, Tenn.

Miss., Greenwood—Leflore County voted

Miss., Greenwood—Leflore County voted \$500,000 bonds for building conc. highways, including U. S. Highway 49 through county and State Highway 10, Itta Bena to Sunflower County line.

Miss., Jackson-City plans paving Magnolia

Miss., Yazoo City—City plans expending \$148,000 for completing paving program. See Financial News Columns.

MISSOURI—State Highway Comsn., T. H. Cutler, Ch. Engr., Jefferson City, opens bids May 29 for 77 roads and 41 bridges in foliowing counties:

Daviess—2.248, 2.983, 2.854, 3.392 mi. 20-ft.

conc.. Pattonsburg south, 21,710 cu. yd. excavation, 130,309 sq. yd. pavement, 300C, 300D, 300E, 300F; 3.295 ml. chats, Altamont south \$26,436 cu. yd. excavation, 32,690 lb. struc. steel, 2467 cu. yd. pavement, 1-beam bridge over Dog Creek, SJ-3;

south \$26,436 cn. yd. excavation, 32,630 lb. struc. steel, 2467 cu. yd. pavement, I-beam bridge over Dog Creek, SJ-3;

Worth—2.231 mi. gravel. Allendale west, 37,660 cu. yd. excavation, 2744 cu. yd. pavement, 46-11;

Chariton—4.209, 2.238 ml. 30-ft. graded earth, Marceline-Keytesville, 124,049 cu. yd. excavation, 337A, 337B;

Livingston—3.731, 1.500 mi. 10-ft. conc., Chillicothe-Avalon, 8090 cu. yd. excavation, 30.519 sq. yd. pavement. 320A, 320B;

Randolph—4.629, 4.462 ml. gravel or crushed stone, Huntsville-Roanoke, 158,979 cu. yd. excavation, 151,400 lb. struc. steel, 11,367 cu. yd. pavement, double box bridge and 2 I-beam bridges, 331C, 331D;

Clark—0.139 mi. gravel, Memphis-Kahoka, 89,604 cu. yd. excavation, 6171 cu. yd. pavement, double box bridge and deck girder bridge, 4-73, 4-76;

Scotland—4.285 mi. gravel, Memphis-Kahoka, 104,205 cu. yd. excavation, 216,500 lb. struc. steel, 5521 cu. yd. pavement, I-beam bridge and truss bridge, 310G; 0.711 mi. gravel, Arbela Spur, 997 cu. yd. excavation, 617 cu. yd. pavement, 4-72;

Lewis—4.545, 4.545, 4.580 mi. gravel, Lewistown-Taylor, 17,128 cu. yd. pavement, 6AP-1A, 6AP-2A, 6AP-3A;

Marion—3.481, 3.651 mi. gravel, Lewistown-Taylor, 17,128 cu. yd. pavement, 6AP-1A, 6AP-4A, 6AP-3A;

Pike—4.393 mi. 20-ft. conc., Bowling Green north and south, 37,839 cu. yd. excavation,

Marion—3.481, 3.051 mi. gravel, Lewistown-Taylor, 8253 cu. yd. pavement, 6AP-4A. 6AP-5A;
Pike—4.393 mi. 20-ft. conc., Bowling Green north and south, 37,839 cu. yd. excavation, 54.226 sq. yd. pavement, deck girder bridge, 257G; 0.730, 2.075 mi. 29-ft. conc., Bowling Green-Louisiana, 6988 cu. yd. excavation, 34,-848 sq. yd. pavement, 275D, 277A;
Benton—1.109 mi. gravel. Warsaw Spur, 24,523 cu. yd. excavation, 1541 cu. yd. pavement, 65-67A;
Lafayette—3.772 mi. 30-ft. graded earth, Waverly-Concordia, 63.005 cu. yd. excavation, deck girder bridge over Sale Fork Creek, 23AP-1;
Boon—2.841, 3.027 mi. shale or crushed stone, Route 63-Hallsville, 38,590 cu. yd. excavation, 7152 cu. yd. shale, 5441 cu. yd. crushed stone, SD-1, SD-2;
Callaway—4.100, 4.994, 3.617, 0.764, 3.398 mi. 20-ft. conc., Fulton-No. Jefferson City, 153, 371 cu. yd. excavation, 186,752 sq. yd. pavement, double box bridge, slab bridge and truss bridge, 97A, 97B, 97C, 97D, 97F; 0.249 mi. 20-ft. conc., Ashland south, 5896 cu. yd. excavation, 2926 sq. yd. pavement, 63-44;
Montogmery—3.298, 3.217 mi. gravel, New Florence-McKittrick, 72,359 cu. yd. excavation, 8431 cu. yd. pavement, 19-75, 19-76;
Franklin—3.643 mi. gravel. Labadie-Oetters, 30.839 cu. yd. excavation, 29,990 lb. struc. steel, 3477 cu. yd. pavement, 1-beam bridge, SM-2; 4.537, 3.606 mi. 20-ft. conc., Gasconade County-Union, 35,974 cu. yd. excavation, 86,745 sq. yd. pavement, 326B, 326C;
Gasconade—4.549, 4.936 mi. 20-ft., 28,455 cu. yd. excavation, 112,475 sq. yd. pavement,

cavation, 86.745 sq. yd. pavement, 326B, 326C;
Gasconade—4.549, 4.936 mi. 20-ft., 28,455 cu. yd. excavation, 112,475 sq. yd. pavement, 3216A, 326G;
St. Francois—3.171 mi. gravel, Washington County-Route 32, 17,571 cu. yd. excavation, 3816 cu. yd. pavement, deck girder bridge, SA-1;
St. Louis—2.779 mi. 20-ft. conc. widening and 20-ft. asphaltic conc.. 46,486 cu. yd. excavation, 33,085 sq. yd., 3551 tons pavement, double box bridge, 61-69: 2.011 mi. 20-ft. conc. upd. excavation, 1605 cu. yd. conc. in bridges, 23,302 sq. yd. pavement, slab and deck girder bridge and triple box bridge, 7TR-1;
Washington—1.045 mi. gravel, Potosi south—

TTR-1:

Washington—1.045 mi. gravel, Potosi southwest. 2792 cu. yd. excavation, 1036 cu. yd. pavement, deek girder bridge, SA-1A:

Lawrence—3.411, 3.046, 4.089 mi. 20-ft. bit. retread, Monett-Aurora. 124.889 sq. yd. pavement, 60-14A, 60-15A. 60-16A:

St. Clair—4.079, 4.373 mi. gravel, Roscoe-Osceola, 132,378 cu. yd. excavation. 10,464 cu. yd. pavement, 2 double box bridges, I-beam and truss bridge and slab bridge, 82-6, 82-7;

Vernon—2.718. 3.323 mi. 20-ft. conc.. Novada west, 41,552 cu. yd. excavation, 71,484 sq. yd. pavement, double box bridge, 264C, 264D;

564. yd. pavement, double box bridge, 264C;
Dallas—4.891, 4.590, 3.999 mi. gravel, Route
65-Bennett Springs, 137,820 cu. yd. excavation, 1170 cu. yd. conc. in bridges. 14,210
cu. yd. pavement, slab and arch bridge over
Niangua River. 64AP-61, 64AP-62, 64AP-63;
Laclede—2.549, 4.628, 4.935 mi. gravel, 1/ch
anon-Bennett Springs, 117,049 cu. yd. excavation, 12,737 cu. yd. pavement, deck girder
bridge, 64AP-64, 64AP-65, 64AP-66;
Texas—0.983 mi. gravel through Houston,
19,697 cu. yd. excavation, 1205 cu. yd. pavement, 2 box bridges, deck girder bridge.
63-81; 1.667 mi. gravel Licking east, 3139

cu. yd. pavement, 32-1A; 5.000, 3.672, 3.125, 4.812 ml. gravel, Licking-Success, 14,060 cu. yd. pavement, SA-1A, SA-2A, SA-4A, SA-5A; Wright—3.999, 2.831 mi. pavement, Mt. Grove south, 12,218 cu. yd. excavation, 4078 cu. yd. pavement, double box bridge, SD-6, SD-7;

cu. yd. pavement, double box bridge, SD-6, SD-7;
Bollinger—3.284. 3.731 mi. gravel. Route 51-Marquand, 37,621 cu. yd. excavation, 4412 cu. yd. pavement, SA-1, SA-2;
Madison—1.934 mi. gravel, Marquand-Bollinger County. 11,623 cu. yd. excavation, 1216 cu. yd. pavement, triple box bridge. Ref. 3, SA-1; 2.829 mi. 24-ft. graded earth, St. Francois County-Route 70, 20,747 cu. yd. excavation, 2 box bridges, SA-1; 4.988 mi. 24-ft. graded earth, St. Francois County-Route 70, 111 cu. yd. excavation, SH-2; 4.919, 3.440 mi. gravel. Route 67-Savo, 3149 cu. yd. pavement. SN-1A, SN-2A; New Madrid—1.799 mi. gravel, Dunklin County-Gideon. 685 cu. yd. pavement, SC-2A; Pemiscot—3.560 mi. gravel, Holland-Cooter, 6761 cu. yd. excavation, 42,450 lb. struc. steel, 3083 cu. yd. pavement, I-beam bridge, SE-1; Stoddard—2.833 mi. 20-ft. conc., Essex-

SE-1; Stoddard — 2.833 mi. 20-ft. conc., Essex-Gray Ridge, 45,457 cu. yd. excavation. 2.653 mi. 10 and 20-ft. conc., Essex-Gray Ridge, 14,463 cu. yd. excavation. 14780 lb. struc. steel, 21,534 sq. yd. pavement, 60-89C.

steel, 21,534 sq. yd. pavement, 60-89C.

Mo., Clayton, St. Louis—St. Louis County
Court has low bids for roads: Midland
Blvd., 9024 ft. 20-ft. rein. conc., Israel Bros.
Construction Co., 6635 Delmar Blvd., \$95.668; Ennis Ave., 8671 ft. 20-ft. bitum. surface, Charles N. Lund, 114 N. Seventh St.,
\$42,435; Milburne Ave., 2697 ft. 20-ft. bitum.
surface. Eyerman Contracting Co., 1210 S.
Grand St., \$11,888.

Mo., St. Joseph—City Engr. drawing plans
for extensive changes in Farson St., widening, new asphaltic conc. walks. new asphaltic conc. surface with new conc. base where
necessary, new curbing.

Mo., St. Louis—City. Bd. of Public Ser-

necessary, new curbing.

Mo., St. Louis—City, Bd. of Public Service. approved street paving ordinances: Dillenberger Ave., asphaltic conc., \$10,029; Lillian Ave., vibrolithic conc., \$12 615; 10th St., vibrolithic conc., \$14,310; Finney Ave., asphalt. \$85,869; another section same street, vibrolithic conc., \$26,290; Geyer Ave., vibrolithic conc., \$26,290; Geyer Ave., vibrolithic conc., \$389; Leona St., bituilithic, \$37.630; Kingshighway, N. W., asphalt, \$171,190.

Mo., St. Louis—City, Bd. of Public Service, let contract for streets: La Salle, bituilithic, Granite Bituminous Paving Co., Rwy. Exch. Bldg., \$33.388; Penrod Ave., macad., Webb-Boone Paving Co., 5103 Fyler St., \$4583; Fairview Ave., rein. conc., Stiers Bros. Construction Co., 2944 Magazine St., \$11.932; Hampton Ave., conc., Joseph T. Mc-Mahon Construction Co., 1415 Farragut St., \$9131; Loughborough Ave., asphalt, Asphalt Paving Co., 1308 Sublette St., \$22.033; Dolman, asphalt, Flinn Paving Co., 1405 S. First St., \$44,254.

N. C., Winston-Salem—City probably call for bids for paving W. Four and Construction based.

N. C., Winston-Salem-City probably call for bids for paving W. Four and One-half St.

Oklahoma — State Highway Comsn., Sam R. Hawks, Chmn., plans 34 mi. paving U. S. Highway 66 between Clinton and Bridge-

S. C.. Columbia—State Highway Comsn., Ben M. Sawyer, Ch. Highway Commr., author ized \$10,000,000 for highway construction in 1931.

Tennessee—State Dept. of Highways and Public Works, R. H. Baker, Commr., Nashville, opens bids June 3 for 3.309 mi. naving, State Highway 78 between Bogota road and Oblon County line, Dyer County extension to FAP-A, Lake-Obion Coun'ies, F'P 253-A, 10,000 cu. yd. common and borrow excavation, 34 751 sq. yd. Portland cement conc. pavement.

conc. pavement.

Tennessee—State Dept. of Highways and Public Works R. H. Baker, Commr., Nashville, opens bids June 5 for 3.962 mi. paving. State Highway 24 between Davidson County line and Mt. Juliet road, FAP 80-E Reop., Wilson County. 4750 cu. yd. excavation, 46.490 sq. yd. Portland cement conc. pavement (plain).

tion, 46,490 sq. yd. Portland cement conc. pavement (plain).

TEXAS—State Highway Comsn., Gibb Gilchrist, Highway Engr., plans 11 roads in following counties:

Houston—10.195 ml. rein. conc. pavement. Highway 19, end of FAP 485-B to Anderson County line. FAP 485-A. Unit 2:

Haskell—9.971 ml. grading, draining, Highway 51, intersection of Highway 18 to Rule, SAP 959-D, Unit 1, \$43,000;

Kendall—14.946 ml. grading, draining, Highway 9, north city limits of Boerne to Sta. 790 plus 74, rear Comfort, FAP 46, Rev., Sec. B;

Lipscomb—11.222 ml. grading, draining, Highway 33, Oklahoma State line to Hemphill County line. FAP 625-B, Unit 2:
Culberson—13.068 ml. grading, draining, Highway 1, 13 ml. east of Van Horn east, FAP 558-E, Unit 1;

Presidio—15.030 mi. grading, draining, Highway 1118, Marfa to Perdiz Flat, SAP 970-A, Unit 1;

Matagorda—8.394 mi. grading, draining, conc., Highway 60, 2.5 mi. south of Wadsworth to Matagorda, FAP 416-Reop., \$212,000;

Tyler—10.095 mi. grading, draining, Highway 40, Hardin County line to Hillister, \$116.000.

way 40, Hardin County line to Hillister, \$116.000.

Colorado—13.569 ml. grading, draining, Highway 71, Wharton County line to Altair, SAP 945-B. Unit 1, \$92.000;
Crane—3.267 ml. grading, draining, Highway 99, Crockett County line to Upton County line, SAP 903-E, Unit 1;
Hemphill—13.837 ml. grading, draining, conc., Highway 33, Lipscomb County line to junction of Highway No. 4 and 33, FAP 621-A, Units 1 and 2;
Ellis—7.523 ml. rein. conc. pavement, Highway 14, Navarro County line to south city limits of Ennis, FAP 569-F, \$194,600;
Freestone—3.778 ml. rein. conc. pavement, Highway 14, Navarro County line to Limestone County line, FAP 463-B, Unit 2, \$85,00.

Texas—State Highway Comsn., Gibb Gil-christ, Highway Engr., plans 10.073 mi. grad-ing, Highway 9, Sterling County line to How-ard County line, FAP 571-B, Unit 1, \$103.

Tex., Boerne—Kendall County plans expending \$185,000 for road work in Dist. 5.

Tex., Corsicana—Navarro County, J. M. Tullos, County Aud., opens bids June 1 for grading, draining Hardy Ave., 20, 654 cu. yd. excavation, 6738 cu. yd. borrow, 25,479 lb. rein. steel, 56,799 lb. struc. steel, 240 lin. ft. pipe bridge railing, 992 lin. ft. rein. conc. piling, 170.98 cu. yd. Class A overpass.

Tex., Houston—City Council authorized to call for bids for paving Smith St.

Tex., Houston—City Council ordered paving Nace and Shea St., North Side.

Tex., Houston—City, J. M. Nagle, Ch. Engr., has low bid from Uvalde Rock Asphalt Co., 820 Dowling St., at \$17,351, for paving Telephone road, and \$3407, for Woodhead.

Tex., Lubbock—City Comsn. ordered hard surfacing Ave. H, north end of Panhandle & Santa Fe Ry. underpass to Highway 9, 4 blocks, 4-ft. wide.

Tex., Randolph Field—Constructing Quartermaster completing plans for street paving, curb and sewer inlets to cost approx. \$300.000; conc. paving, alternate conc. base, rock asphalt or asphaltic conc. surface; 200.000 sq. yd. asphalt, 200.000 sq. yd. conc., 200.000 sq. yd. bitum. conc., 50,000 lin. ft. curbing, 50,000 lin. ft. gutter, 100,000 lb. rein. steel.

VIRGINIA—State Dept. of Highways, C. S. Mullen, Ch. Engr., Richmond, opens bids June 2 for 15 roads and 3 bridges in following counties:

Hanover—6 mi. conc. widening, Solomon's Store to 2.3 mi. south of Ashland, 13,339 cu. yd. excavation, 38,627 sq. yd. conc., S260;

Russell—6 mi. conc.

Ranover—5 ml. conc. Wideling, Storbiology cu. yd. excavation, 38,627 sq. yd. conc., \$260;

Russell—6 ml. gravel, Route 11, Dickenson-ville to 3.3 ml. west of Lebanon, 5000 cu. yd. excavation. 19,517 cu. yd. gravel, S306;

Smyth—8 ml. macad., Route 10, approaches to N. & W. tracks, 1.5 ml. east of Marion, 7250 cu. yd. excavation, 943 sq. yd. macad., \$3616;

Henrico—2.5 ml. gravel, Route 420, Greendale to Intersection of Route 41, 15,606 cu. yd. excavation, \$181 cu. yd. gravel, \$681;

Augusta-Rockbridge — 9 ml. slag and gravel, Route 17, Craigsville to .3 ml. east of Goshen, 5000 cu. yd. excavation, 22,000, 19,014 cu. yd. slag and gravel, \$2380;

Warren—9 ml. shale, Route 55, Riverson to .7 ml. east of Strasburg, 5000 cu. yd. excavation, 19,014 cu. yd. shale. \$116D;

Patrick — 3 ml. grading, Route 23, near Cruize's Store, 60,940 cu. yd. excavation, \$507;

Buckingham-Prince Edward—5.5 ml. soil, Route 32, near Sheppards. 62,642 cu. yd. excavation, 18,174 cu. yd. soil, bridge over Appomattox River, Route 32, near Farmville;

Westmoreland—8 ml. grading, draining, Route 607, Hague to Templeman, 48,616 cu. yd. excavation, \$682;

Middlesex—4 ml. grading, draining, Route 30, Urbanna Creek to Saluda, 24,263 cu. yd. excavation, \$682;

Charlotte—2 ml. soil, Route, 1 ml. east of Roanoke Creek to 1 ml. west of Roanoke Creek to 3 ml. north of Charlotte, 17 075 cu. yd. excavation, 5897; 1.7 ml. soil, Route 304, Cullens to .8 ml. north of Charlotte, 17 075 cu. yd. excavation, 5816 cu. yd. soil, \$702.

VIRGINIA—State Dept. of Highways, C. S. Mullen, Ch. Engr., Richmond, has low bids for road and bridge in following counties:

Augusta—2.5 ml. macad. surface treatment, Roure 39, Pace Construction Co., Mountain Trust Bldg., Roanoke, \$41,138;

Amherst—97½-ft. bridge over Rock Creek, Route 13, A. N. Campbell & Co., Inc., Peoples Natl. Bank Bldg., Lynchburg, \$5574.

Va., Fort Humphrey—Constructing Quartermaster expend \$12,273 for new sidewalks and other improvements.

Va., Quantico—Ch., Bureau of Yards and Docks, Navy Dept., Washington, D. C., opens bids May 27 for conc. roads, shoulders, and curbs, bitum. surfacing, conc. structure, and water drain, sewer lines, marine barracks.

Va., Quantico—Ch., Bureau of Yards and Docks, Navy Dent., Washington, D. C., opens bids June 10 for conc. paving.

west virginia—State Road Comsu., Geo. E. White, Sec., Charleston, has low bids for 13 roads and 3 bridges, involving \$700,000. in following counties:

Cabell—670 ft. of new floor system on Fudge Creek bridge, Duncan & Norris, Huntington. \$16,819;
Grant—Stoney River bridge, superstructure, Fairmont Mining Machinery Co., 10th St. and Belt Line, Fairmont. \$9000; substructure, Pocahontas Construction Co., Cass, \$10.087;
Lewis—Polk Creek bridge, Devis cast News

St. and Bett Line, Fairmont. \$5000; substructure, Pocahontas Construction Co., Cass, \$10.087;
Lewis—Polk Creek bridge, Davis and Reynolds, Morgantown, \$6922;
Boone—3.04 mi. grading, conc. paving, Kanawha County Line-Racine road, Mirable & DeFurion, Welch, \$115,444:
Calhoun-Roane-Gilmer — 26.3 mi. surface treatment, Spencer-Glenville road, Southern Oil & Tar Co., Clay St. and River Road, Louisville. Ky., \$33.354;
Mason-Putnam—15.8 mi. surface treatment, Red House-Leon road, Southern Oil & Tar Co., \$23,565;
Ohio—3.08 mi. widening. conc. paving, National road, Stringer & Springer Construction Co., Wheeling Bank & Trust Bldg., Wheeling, \$109.485;
Pleasants—5.2 mi. grading, draining, conc. paving, St. Marys-Bens Run road, Keely Construction Co., \$178,211;
Preston—5.71 mi. grading, draining, Breedlove-Brookshire road, Pocahontas Construction Co., \$55,921;
Putnam—1.5 mi. retread surface. Red House-Leon road, Southern Oil & Tar Co., \$4929; 4.7 mi. surface treatment. Hurricane-Mount Vernon road, Southern Oil & Tar Co., \$6375;
Raleigh—2.3 mi. grading, stone base, re-

Mount Vernon road, Southern On & Am. 68., \$6375;
Raleigh—2.3 mi. grading, stone base, retread surface, Mabscott-Crab Orchard road, Gilbert Construction Co., Glen Hedrick, \$71,446; 16.45 mi. retread surface, Harper-Dameron road, R. F. Kirkham & Co., \$56,419;
Randolph—7.41 mi. grading, draining, Canfield-Bowden road, Sam G. Polino, 208 Newton St., Fairmont, \$213,463;
Ritchie—5.09 mi. retread surface, Harrisville-Ellenboro road, D. Rich, Weston, \$11,180.

ville-Ellenboro road, D. Rich, Weston, \$11,-180.

WEST VIRGINIA—State Road Comen...
Geo. E. White, Sec.. Charleston, opens bids May 26 for 12 roads and 3 bridges in following counties:

Hardy—Lost River Bridge No. 1262. Proj. 3471. 130-ft, steel through truss superstructure on conc. substructure; separate proposals on substructure; separate proposals on substructure; separate proposals on substructure; superstructure on conc. substructure; superstructure on conc. substructure; superstructure on conc. substructure; substructure and on supertstructure; contractors may proposalump to be deducted from superstructure bid in event both contracts are awarded; Mercer—Simmons Bridge No. 1276. Proj. 360-A, 82-ft. span steel pony truss superstructure on conc. substructure; both to be let in one contract;

Braxton—7.8 mi. conc., Proj. 3524;
Grant-Hardy—9.71 mi. retread. Petersburg-Romney road. Proj. 3013-62 & 3149;
Hampshire-Mineral—13.09 mi. retread surface. Romney-Alaska road, Proj. 164-A & 164-B & C;
Kanawha — 5.5 mi. grading, draining. Charleston-Lincoln County Line road, Proj. 3483;

Mason—8.22 mi. grading, draining. Point Pleasant-Mt. Olive Church road Proj. 3501:

Charleston-Lincoln County Line road, Proj. 3483;

Mason—8.22 mi. grading, draining. Point Pleasant-Mt. Olive Church road Proj. 3501;
Mercer—6.7 mi. grading, draining, Matoaka-Kegley road. Proj. 3484;
Mineral—7.91 mi. grading, draining, shale surfacing, Proj. 3492;
Randolph—21.8 mi. surface treatment, Proj. 152-B7C & 149-B&C;
Ritchle-Tyler—12.4 mi. gravel surfacing. Tyler City—Pennsboro road, Proj. 2223-3417 & Part 3389;
Wayne—29.32 mi. surface treatment, Wayne-Crum road, State Route 8; 11.62 mi. surface treatment, Lavalette-Kenova road, State Route 75;

Wyoming-7.0 mi. grading, draining, Pineville-Oceana road, Proj. 3485.

#### Contracts Awarded

Fla., Tavares—Lake County Commrs. let contract to Manly Construction Co., for sur-facing road between Tavares and Mt. Dora.

Ga., Columbus—City Comsn. let contract for paying: Fourth St., Barlow-Gordy Contracting Co., Garraud Bldg., 2 sections, \$17,956, and \$5418; 18th Ave., Campbell Contracting Co., 1312 10th Ave., \$19,090; Buena Vista road, Campbell Contracting Co., \$9270.

Georgia—State Highway Bd., Atlanta, let contract to Jenkins County Commrs., Millen, for widening, grading and relocating highway between Millen and Burke County line, Route 21, \$78,000.

Md., Cambridge—City let contract to P. D. Phillips & Bro., Salisbury, for paving, grad-ing, Muir and Academy St.

Md., Havre de Grace—City let contract to Thomas J. Borneman, Havre de Grace, for paving Adams and Warren St.

Missouri—State Highway Comsn., T. H. Cutler, Ch. Engr., Jefferson City, let contracts for 4 roads, Mercer County: 1.568 mi. crushed stone, 4-339A, Pioneer Construction Co., 270 Glover Bldg., Kansas City; 4.207, 2.706, 3.218 mi. crushed stone, 4-339B, 4330D, Mike Haase, St. Joseph.

Mike Haase, St. Joseph.

Mo., St. Joseph—Buchanan County Court, Harvey J. Boyle, Presiding Judge, let contract to Consolidated Paving & Construction Co. at \$96,120 for grading, draining 11.4 mi. extension of refund road.

Mo., St. Joseph—City let contracts for street and sidewalk work involving over \$24,000 to following firms: Land Construction Co.. Corby Bldg.; Sayles Construction Co., 2615 Renick St.; Judson Engineering & Construction Co., 1811 Faraon St.; and Koch Bridgeford Construction Co., \$16½ Francis St.

N. C., Kings Mountain—City, Chas. G. Dilling, City Clk., let contract to Biltmore Concrete Co., Technical Bldg., Asheville, for 40,000 sq. yd. streets.

concrete Co., Technical Bldg., Asheville, for 40,000 sq. yd. streets.

OKLAHOMA—State Highway Comsn., Sam R. Hawks, Chmn.. Oklahoma City, let contracts for graveling 6 roads in following counties:

Texas-Beaver—40.5 mi., U. S. Highway 64, 3 sections, Lee Schultz, Alva, at \$2578, \$3092 and \$2147; R. C. Turner, Durant, 3 sections, \$1997, \$357, \$448; Crushed Rock Co., Durant. one section, \$4181;

Texas—23 mi., U. S. 64, R. C. Turner, on 3 bids. \$798, \$2568, \$2997;

McClain—4 mi., U. S. 62, Stansbury-Mitchell Construction Co., Ardmore, \$960;
Canadian—16 mi., U. S. 66, F. F. Johnson, Welch. \$10,569;
Jackson—9.3 mi., U. S. 62, J. A. Wylie, Marlow, \$5990;
Garvin—2 mi., State Highway 19, R. B. Barnett, Proctor, \$690.

Tex., Houston—City, J. M. Nagle, City

Tex., Houston—City, J. M. Nagle, City Engr., let contract to Gulf Bitulithic Co., 2820 Polk St., for widening La Porte road paving, 20 to 40 ft.

west virginia A. State Road Comsn., Geo. E. White, Sec., Charleston, let contracts for 3 roads in following counties:

Cabell—53,000 ft. wire guard rail, between culloden and Barboursville, T. E. Walker, 2839 Third Ave., Huntington, \$13,244:

Cahoun—13 mi. surface treatment, Grantsville-Millstone road, Southern Oil & Tar Co., Clay St. and River Road, Louisville, Ky., \$17,574;

Kanawha—5.4 mi. retread surface, Little Tyler Mountain-Putnam County Line road, Southern Oil & Tar Co., Louisville, Ky., \$22,663.

#### Sewer Construction

Sower construction in LAND DEVELOP-MENT projects involves the expenditure of large sums of money. Under that classifica-tion details of these improvements are re-ported.

Ga., Austell—W. A. Briggs, Capers Bldg.. Greenville. S. C., reported, has contract for construction sewer lines, paving, etc.. for Clarke Thread Mill; plans by J. E. Sirrine & Co., Engrs.. Greenville, S. C. 5-7

La., New Orleans—Sewerage and Water Bd. receives bids May 21 for furnishing 75 h. p. electric motor.

La., Shreveport — Forgy, Hanson & Mc-Corkle, Inc.. Lake Charles, reported, low bid-der at \$37.900 for sanitary sewer system and cast iron force main at Barksdale Field. 5-7

Md., Baltimore—City, Bureau of Sewers, receives bids May 27 for tank for holding gas at Back River.

Md.. Baltimore—Thompson Construction Co., Relay, has contract at \$33,973 for sewers Storm Water Contr. 164.

Md., Rockville—See Water Works.

Mo., St. Louis—Bd. of Public Service, receives bids June 9 for sewers within Sharp Ave., Sewer Dist. No. 1.

Ave., Sewer Dist. No. 1.
S. C., Anderson—City, G. T. McGregor, Mayor, plans voting on sewer bonds. See Financial News Columns.

Tex., Austin—W. C. Cullon & Co., Allen Bldg. Dallas and Austin, has contract at \$44,306 for sanitary sewers, Sanitary Sewer Fund Contr. No. 12 in various districts.

5-14

Tex., Dumas—Panhandle Construction Co., Lubbock, reported, has contract at \$30.701, for sewer system; \$70,000 bonds available. 5-14

Tex., Houston—City, J. M. Nagle, City Engr., reported, completed plans for main line sewer to connect the \$1,000,000 East End sanitary sewage disposal plant with South Side disposal plant; line will be 5 ft. in diam., cost \$400,000; construction to begin in August; G. L. Fugate. Principal Asst. City Engr., in charge of plant and sewer plans.

Tex.. Houston—Russ Mitchell. Inc., Petroleum Bldg., reported, has contract for storm and sanitary sewers.

Tex.. Mount Pleasant—City. D. S. Nolte.

Tex., Mount Pleasant—City, D. S. Nolte, City Engr., plans constructing sewer plant.
Va., Fort Monroe—J. P. Mahon & Co., Essex Bldg., Norfolk, Va., low bidder for Sewer for U. S. Govn.

#### Telephone Systems

Ky., Campbellsville—Campbellsville Home Telephone Co., capital \$25,000, incorporated; John J. Jeter, W. T. Collins.
Okla., Holdenville—Southwestern Bell Telephone Co., St. Louis, Mo., installing modern switchboard in new telephone building, expending \$300,000 for building and equipment. Tenn., Ooltewah—Ooltewah Telephone Co. acorporated; H. C. Brand, N. E. Cagle.

renn., Ooitewah—Ooitewah Telephone Co. incorporated; H. C. Brand, N. E. Cagle.

Tex., Fort Worth—Southwestern Bell Telephone Co., Dallas, received bids May 18 for 2 telephone buildings, Willing Ave. and Bowle St.; brick and rein. conc.. 2 stories and basement, \$2x54 ft., steel stairs, plastered walls, cast and cut stone, metal windows; Chestnut and N. 24th St., brick and rein. conc., 1 story and basement, 46x84 ft., conc. and terrazzo floors, cut and cast stone, terra cotta trim, metal windows; following prospective bidders: Quisle & Andrews, 2216 W. 7th St.; J. D. Johnson. Neil P. Anderson Bidg.; James T. Taylor, 1263 Aviation Bidg.; Butcher & Sweeney, 806½ Taylor St.; Wm. H. Southwell, 605 E. 2nd St., all Fort Worth; Balfanz Const. Co., Abilene; J. E. Johnson, 1000 Franklin Ave., Waco; Eckes-Burton Construction Co., Dallas; Bellows-Maclay Const. Co., Dallas.

Tex., Port Arthur—Port Arthur Radio Corp., incorporated; K. C. Rogers, 324 Procter St.

ter St.

W. Va., Iaeger—E. S. Moore, Greenwood,
S. C., reported, granted 30 yr. franchise for
telephone line Iaeger and Bishop; will be operated as Black Diamond Telephone Co.;
locate switchboard at War and Iaeger where
franchises have been secured; extensions
later planned for future construction including Tazewell with Bishop, War with Welch,
Welch via Coalwood, etc.

#### Textile Mills

Ga., Austell-See Sewer Construction. .

Ga., Austell—See Sewer Construction...

Md.. Hagerstown—Hagerstown Hosiery Co. incorporated; Bruce C. Lightner, Wareham Bidg., acquired and will operate plant of Antietam Knitting Mills.

N. C., Concord—Hoover Hosiery Co., construct 2 story, 56x160 ft. building; install 51 gauge full fashioned machines; increase of 75.000 doz. pr. annually.

N. C., High Point—Huntley, White, Jackson Co., capital \$100.000, incorporated; B. F. Huntley, Jr., 911 Hyde St., Winston-Salem; erecting building 40x80 ft.; 2 stories on English St.; manufacture men's hose.

N. C., Laurinburg—L. D. Tucker, Laurinburg., has contract building for McNair Investment Co., leased to Morgan Cotton Mills, Inc.; 100x250 ft.; 1 story; completion in 90 days.

N. C., Lowell—R. N. Aycock, New Hope

N. C., Lowell—R. N. Aycock, New Hope Rd., Gastonia, acting for creditors, reported, acquired Lowell Cotton Mills, Inc., and Peer-less Mfg. Co., Inc.

N. C., Mount Holly—American Yarn and Processing Co., advises has rebuilt pump house and 2 motors recently burned; equip ment in operation.

Va., Blackstone—Shapley Investors, Inc., Brooklyn, N. Y., reported, acquired Blackstone plant of Klotz Silk Mfg. Co.; plans operat-ing.

Va., Norfolk—Bemis Bros. Bag Co., St. Louis, Mo., and New York, reported, acquired Norfolk plant of Percy Kent Bag Co., Inc., on 26 St. near Hampton Blvd.; will operate.

Va., Winchester—J. H. Yost, acting for group of business men, reported acquired real estate, equipment and stock of Arthur G. Jones Woolen Mill.

Va., Winchester—Winchester Woolen Mills, capital \$50.000, incorporated; C. P. McVicar, B. M. Sullivan; to operate former woolen plant of Arthur G. Jones Woolen Mills Co., lately acquired.

#### Water Works

Details of water works improvements in connection with the many LAND DEVELOP-MENT operations will be found under that classification.

Ark., Clarksville—McEachin and McEachin. Little Rock, reported have contract for water plant; Sam Davies, Engr., Morrillton. 11-6

plant; Sam Davies, Engr., Morrillton. 11-6
D. C., Washington — Dist. Commrs., reported approved employment of Malcolm Pirnie, 25 W. 43rd St., New York, as consulting architect on construction of reservoir, approximately 3,000,000 gal. capacity on Federal land in Fort Stanton Park at east end of W St., S. E.

of W St., S. E.

D. C., Washington—Dist. Commrs. receive bids May 26 for furnishing, delivering and erecting 20,000,000 gal. electric driven centrifugal pumping unit at Bryan St. pumping station. See Want Section—Bids Asked.

Ga., Thomasville—W. R. McGrew Co., Thomasville, reported, closed contract to erect for Payne Whitney at Greenwood Plantations a steel tank, 85 ft. high, capacity 30,000 gal.

Ga. Thomasville—City D. P. Pringle Synt.

Plantations a steel tank, 85 ft. high, capacity 30,000 gal.

Ga., Thomasville—City, D. R. Pringle, Supt. Water Works, receives bids June 8 for water system plant of 1,500,000 gal. daily capacity; plans by Wiedeman & Singleton, Conslt. Engrs., Candler Bldg., Atlanta; following contractors estimating: Joe Cothran, Candler Bldg.; Crockett & Spruill, 1646 Pelham Rd., N. E.; Smith-Pew Constr. Co., 435 Irwin St., N. E.; J. B. McCrary Co., C. & S. Bldg.; Copeland-Wey Co., Red Rock Bldg.; Hornbuckle Constr. Co., Standard Bldg.; Burford, Hall & Smith, Red Rock Bldg.; S. Page Rees, 137 Huntington Rd.; McDonald Lawrence, Metter Construction Co., Dorr Co., Candler Bldg., and Crane Co., 126 Collins St., S. E., all of Atlanta: Fiske-Carter Construction Co., Masonic Temple, Greenville, S. C.; Harrison-Wright Co., 4 W. Third St., Charlotte, N. C.; A. H. Guion & Co., 256 W. Main St., Gastonia, N. C.; Permutit Co., 440 Fourth Ave., New York; Roberts Filter Co., Darby, Pa.; E. W. Bacharach & Co., 207 Rialto Bldg., Kansas City, Mo.; International Filter Co., 59 E. Van Buren St., Chicago, Ill.; American Water Softener Co., 1646 Pelham Rd., Atlanta.

La., Alexandria—I. B. White Drilling Co., Alexandria, reported, low bidder on construc-tion of deep water well at Camp Beauregard.

La., Alexandria—I. B. White Drilling Co., Alexandria, reported. low bidder on construction of deep water well at Camp Beauregard. Md., Cumberland—Following contractors estimating on dam in valley of Evitts Creek, 12 miles north of city: gravity type; bids opened May 27; J. E. Greiner & Co., Conslt. Engrs., 1201 St. Paul St., Baltimore: Merritt-Chapman & Scott Corp., 1301 Fidelity Bidg.; Whiting-Turner Constr. Co., Stewart Bidg.; Arundel Corp., Pier 2, Pratt St.; Forbes-Murphy Constr. Co., 326 St. Paul St., Sanford & Brooks, South and Water Sts.; P. C. Street Engr. Co., 404 St. Paul St., all Baltimore: Scott Bros. Constr. Co., Inc., Rome, N. Y.; Hardaway Contr. Co., Inc., Rome, N. Y.; Hardaway Contr. Co., Columbus, Ga.; Holmes Constr. Co., Wooster, O.; Poffinberger & Mause, Myersville, W. W. Boxley & Co., Roanoke, Va.; Spencer White & Prentis, Washington Blvd. Bldg., Detroit, Mich.; Wm. Eisenberg & Sons, Inc., 506 Broadway-Stevens Bldg., Camden, N. J.; Kries Contr. Co., Inc., Knoxville, Tenn., Maxon Constr. Co., Inc., Knoxville, Tenn., Maxon Constr. Co., Inc., Graybar Bldg., Camden, N. J.; Kries Contr. Co., Inc., Graybar Bldg., H. W. Nelson, 57 William St., both New York City: Tri-State Engineering Co., 39 Liberty Trust Bldg.; Vang Constr. Co., Liberty Trust Bldg.; Cumberland Contracting Co., Valley St. Bridge, all Cumberland: Gooth & Fl'nn Co., 1942 Forbes St., John F. Casev Co., P. O. Box 1753; Vang Constr. Co.. 2022 Grant Bldg.: Wa'ter S. Rae, Oliver Bldg.: Rust Engineering Co., Koppers Bldg., all of Pittsburgh, Pa.; James McGraw Co., 1010 Commercial Trust Bldg.; Seeds & Derham, 25 Kaplewood Ave., both Philadelphia, Pa.; Folwell Engineering Co., 333' N. Michigan Ave., Chicago, Ill.

Md., Cumberland—City and Evitts Creek Water Co., receives bids May 27 for construction of New Evitts Creek Dam, bridge across the dam, relocation of roads in reservoir area and all appurtenant work in accordance with plans and specifications of file at office of City Engr., City Hall, and at office of The J. E. Greiner Co., Consit. Engrs., 1201 St. Paul St. Baltimore. See Want Section—Bids Asked.

Md., Rockville — Town, J. Roger Spates, Mayor, soon start work drawing plans for tank and tower and addition to sewerage plant; drill new well and increase pipe distribution system throughout the town; \$50.000 available.

Miss., Ripley—Ripley Utilities Co.. reported, plans water works system.

N. C., Lowell—National Weaving Co.. reported, installing water purification plant, take water supply from South Fork River; Hungerford & Terry, Inc., Engr., Clayton, N. J.

ported, instating vactor take water supply from South Fork River; Hungerford & Terry, Inc., Engr., Clayton, N. J.

Tenn., Lebanon—City, Sam S. Bone, Commr. Public Works, receives bids May 26 for addition to water supply works: plans by Wiedeman & Singleton. Conslt. Engrs., Candler Bldg., Atlanta; following contractors estimating: Smith & Pew Constructing Co., 435 Irwin St.. N. E.; Hornbuckle Construction Co., 509 Standard Bldg., J. B. McCrary Co., C. & S. Bldg., and Crockett & Sprmuill, 1646 Pelham Rd. all Atlanta; V. L. Nicholson Co., Box 661, Knoxville, Tenn.; Harrison-Wright Co., 4 W. Third St., Charlotte, N. C.; Volz Construction Co., 106 Baltimore Bldg., Memphis, Tenn.; Gauger Construction Co., 910 Fidelity Bldg., Memphis, Tenn.; V. B. Higgins & Co., Kinney Bldg., Charlotte, N. C.; Fiske-Carter Construction Co., Spartanburg, S. C.; The McClelland Co., Latta Arcade. Charlotte, N. C.; A. H. Guion & Co., 256 W. Main St., Gastonia, N. C.; E. O. Korsmo Co., Porter Bldz., Memphis: M. & Q. Construction Co., 68 Arcade Bldg., Nashville; W. L. Halley & Co., Nashville; Burford, Hall & Smith, Red Rock Bldg., Atlanta, Ga.; Sherman Machine Works, 18 E. Main St., Oklahoma City, Okla.; Roberts Filter Mfg. Co., Darby, Pa.; Permutit Co., 440 Fourth Ave., New York City; Pittsburgh-Des Moines Steel Co., Atlanta, Ga.; Wilson-Hewitt Co., Market, N. C.; Montgomery-Parker, Rockport, Ind.; McEachin & McEachin, Home Ins. Bldg., Little Rock, Ark.; Dudley-Murphy Constr. Co., West Palm Beach, Fla.; Norwood Engr. Co., Florence, Mass.; E. W. Bacharach & Co., 207 Rialto Bldg., Kansas City, Mo.; International Filter Co., 59 E. Van Buren St., Chicago, Ill.; Grinnell Co., Inc., 30 E. Fourth St., Charlotte, N. C.; Fairbanks-Morse Co., 817 E. Vine St., Murfreesboro; Ross C. Heath, 7223 Cortland St., Dallas, Tex.; E. M. Scheflow, 10 Sherwin Block, Elgin, Ill.; F. B. Leopold & Co., Inc., 422 First Ave., Pittsburgh, Pa.; National Cast Iron Pipe Co., Burlington, N. J.

Tex., Beaumont — King-Huff Construction Co., 561 Franklin St., Beaumont, repor

Co., Burlington, N. J.

Tex., Beaumont — King-Huff Construction
Co., 561 Franklin St., Beaumont, reported,
has contract at \$10.289 for constructing
pumping station at Wiess Bluff water intake,

Tex., Corpus Christi—City, Mayor Edwin Flate. will probably have plans complete June 1 for repairs and reconstruction of La Fruita Dam; cost \$400 000; Robt. J. Cummins. Bankers Mortgage Bldg., and Henry E. Elrod, Petroleum Bldg., both Houston. Engrs.

Tex., Houston—City Council, reported, voted to appropriate \$100.000 for construction of water mains leading from site of proposed new northeast pumping plant.

Tex., Houston—Southern Engine & Pump Co., 615 Washington St., reported, low bidders at \$50,000 for drilling northeast plant water we'l.

water we'l.

Va.. Falls Church—Thomas N. DeLashmutt, Arlington. has contract for laying water mains. surface connections and cross arms along Washington St. in corporation limits.

Va., Quantico—Chief. Bureau of Yards and Docks. Navy Dept.. Washington. D. C., receives bids June 3 for conc. and brick pump houses, conc. pump pit, booster pump and piping at Marine Barracks.

W. Va., Parkersburg—City let following contracts for material for water works improvements: Cast iron pipe and fittings, United States Pipe & Foundry Co., Burlington, N. J.; gate valves, Mountain Iron & Supply Co., 213 Market St., Parkersburg; fire hydrants, A. P. Smith Co., East Orange, N. J.; valve boxes, James B. Clow & Sons, 203 N. Talman St., Chicago, Ill.; Getz Bros. & Co., Baltic, O., low bidder \$35,355 for lead joints and at \$32,611 for compound joints for construction of extension to distribution system; Morris Knowles, Inc., Engrs., 507 Westinghouse Bldg., Pittsburgh, Pa. 4-30

#### Woodworking Plants

Miss., West Point—C. S. Waite, 1039 Garvin Place, Louisville, Ky., supervising installation of machinery in former plant of Turner-Day-Woolworth Co., for manufacture barrel staves and heading from low grade, hardwood lumber rel staves and wood lumber.

#### FIRE DAMAGE

Ala., Ashland—Moving picture theater, grocery store, shoe store and pressing shop, owned by Judge E. Q. Phillips; loss \$25,000.

Ark., Hope—Building, Walnut and Second Sts., owned by J. H. Betts Estate; loss \$25,000.

Fla., Clearwater—Nursery house owned by H. D. Yerxa. City Commr.; loss \$6000.
Fla., Leesburg—Apopka Warehouse Co.'s building on S. Second St.; loss \$25,000.

Ky., Waynesburg—C. U. Greer's store near Waynesburg.

La.. Lake Charles—Lagrange High School on Prien Lake Road, south of Lake Charles; loss \$90.000; H. A. Norton, Supt.. Calcasieu Parish School Bd.

Md., Betterton — Country residence near etterton of Morris Clothier, Philadelphia, a.: loss \$20,000.

Miss., Aberdeen—G. B. Gray's residence, Aberdeen-West Point Pike, Monroe County; loss \$30,000.

N. C., Ednyville—Chickasaw Inn owned by O. O. Smith, Greenville, S. C.
Okla. Picher — Concentrating plant at Birthday Zinc Mine, F. W. Evans, Owner; loss \$35,000.

Okla., Oklahoma City—Storage tank of Phillips Petroleum Co., Bartlesville.

Okla., Okesa-High School; loss \$10,000; address School Bd.

Tex.. Barrettville, R. D. from Kerrville— arrettville Bank & Trust Co. bldg. and other buildings.

Tex., El Paso—Building of the Lewellyn Co. (Outdoor Advertising), 1831 Texas St.
Tex., Rio Grande—C. Valle's hardware store; Masonic Lodge; loss \$40,000.

store; Masonic Lodge; loss \$40,000.

Tex., Vega.—Fred Jackson Bldg., housing blacksmith shop, owned by H. Z. McDaniel; Mrs. J. M. Burns' building, occupied by Vega Cafe. operated by D. H. Mills. and Wallace Moore Barber shop, apartments above; Panhandle Hotel owned by Lee Jones; Dr. F. A. Collins' building; J. N. Ivy's building: loss \$25,000.

Va., Jeffersonton—Ahe Rosenberger's store, also containing postoffice.

Va., Petersburg—Ritchie Seed Co.'s warehouse on Grove Ave.: loss \$25,000.

Va., Petersburg—Plant of Dixie Peanut Co., on E. Banks st., subsidiary of American Peanut Corp.; loss \$150,000.

Va., Portsmouth—Rex Theater, operated by Harry Karanicholas, 1447 Ashland Circle, Norfolk; loss \$10,000.

Va., Purcellville — Millard Birdsall's residence; loss \$7000. W. Va., Clarksburg—Clarksburg Country Club, south of Clarksburg; loss \$35,000.

W. Va., Parkersburg—Planing mill of Parkersburg Mill Co., Green St.; loss \$100,000.

## **BUILDING NEWS**

## BUILDINGS PROPOSED

#### Bank and Office

Mo., St. Louis—Boyer & Armstrong, Archts., Arcade Bldg., represent syndicate of New York and Pittsburgh people reported

negotiating for purchase of property, Broadway bet. Olive and Pine Sts., from Mercantile-Commerce Bank & Trust Co., John G. Lonsdale, Pres.; would erect 40-story tower bet. Bank of Commerce and Federal Commerce

Bldgs., remodel latter and connect the three buildings.

N. C., Greensboro—Jefferson Standard Life nsurance Co. has permit to remodel section f bldg.; \$15,000.

Tenn., Jackson—Second National Bank, Will D. Nelson, Pres., soon ready for bids to remodel bldg.; brick, 1 story and basement; 24x42-ft. addition, terrazzo floors: Geo. Mahan, Jr., Archt., Manhattan Bank Bldg.

24x42-ft. addition, terrazzo floors: Geo. Mahan, Jr., Archt., Manhattan Bank Bldg.

Tex., Laredo—Wm. Epstein, 310 E. Craig St., San Antonio, Alphonse Wormser, representative. Laredo, has low bid at \$206,450 from J. O. Everett Co., 1713½ Live Oak St., Dallas, for office bldg., Flores and Farrugut Sts.; low bid at \$16,000 from Kirkwood & Wharton. 523 N. Flores St., for heating 10-story bldg., and at \$13,825 from A. H. Shafer, 829 N. St. Marys St., for 8-story bldg.; low bid at \$17.894 from A. J. Monier & Co., 1446 N. Floral St., for plumbing for 10-story structure, and \$15.725 from West & Gutzeit, 425 Main St., for 8-story bldg.; low bid at \$24.999 from Martin Wright Electrical Co., 1001 Navarro St., for elect. work for 10-story bldg., and at \$20,769 from Graham & Collins Electric Co., 801 Main St., for 8-story structure; all San Antonio; low bid from Westinchouse Electric Elevator Co., Magnolia Bldg., Dallas, for elevators; Walter H. Anderson, Archt., 703 Travis Bldg., San Antonio; Guy M. Trout, Asso. Archt., Laredo; Matthews & Kenan. Engrs., Smith-Young Tower, both San Antonio.

Va.. Richmond—Virginia Electric & Power Co.. Seventh and Franklin Sts.. J. G. Holtz-claw, Pres. nlans to add 2 stories to 12-story bldg.; \$100.000, set back.

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#### Churches

D. C.. Washington—Church of Christ, care W. S. Plager, Archt., 1930 Kearney St., receives bids May 25 for brick and cast stone bldg.. 28th and Douglas Sts., N. E.; fireproof. 1 story; following contractors estimating: M. Gumenick, 1706 16th St.; W. R. Coon. 2414 Irving St., N. W.; W. L. Belt, 1524 Allison St.; J. Bryant Smith, 522 14th St., S. E.

Mo., Cape Girardeau—Grace M. E. Church considers erecting church and Sunday school.

N. C.. Bostic—Oak Grove Methodist Church, Rev. J. N. Snow, Pastor, completing plans for \$10,000 building.

Tex., Fort Worth — Turner Memorial Church, Rev. D. W. Smith. Pastor, 2915 Ellis St.. have plans about complete for brick bldg., 3019 Ellis; 1 story and basement, 70x115 ft.. oak and conc. floors, comp. roof, plaster walls; Harry L. Spicer, Archt., 1264 E. Maddox St.

Va., Richmond — Overbrook Presbyterian Church erect Sunday School addition; Herbert L. Cain, Archt., Grace St. Bk. & Tr. Bidg.

#### City and County

Ark., Stuttgart—Arkansas County votes June 9 on \$55,000 court house bonds.

June 9 on \$55,000 court house bonds.

Fla., Miami Beach—City Council authorized improvements to golf course, including 2 comfort stations, dains, etc.

La. Crowley—City Council has low bid at \$59,875 from C. G. Kershaw Contracting Co., 1908 Lee St., Alexandria, for city hall; Wm. T. Nolan, Archt., Canal Bk. Bldg.. New Orleans.

4-23

La. New Orleans — City Commission Council receives bids until June 2 to remodel Dryades St. Market; \$125,000; new floors, slate roof, plastered walls, steel sash, tile work, painting, elect. and plumbing work, sheet metal work etc.; senarate contracts for market enulpment: Sam Stone, Jr., & Co., Archts., Masonic Temple Bids.

Miss., Hazlehurst—City Bd. of Aldermen receive bids June 1 for remodeling old Baptist Church for city hall; brick and stone.

Tenn.. Chattanooga — Pelice Dept., Mr. Cash. Commr., opens bids June 14 for shed for motor equipment; stone front, 18 ft. deep; R. H. Hunt Co., Archt., James Bldg. Tex., Bay City—Matagorda County Bd. of Commrs., W. E. McNabb, County Judge, has low bid at \$41.500 from Nolan Stewart, Adams Bldg., Port Arthur, for jail; Harry D. Payne, Archt., 714 Kirby Bldg., Houston.

ton.
W. Va., Clarksburg — Harrison County
Court. Maurice L. Loudon, Clk., probably
call for bids by June 18 for \$700.000 court
house: Walker & Weeks, Archts., 11001 Euclid Ave., Cleveland, O.; Edw. J. Wood &
Son, Asso. Archts., Lowndes Bldg., Clarksburg.

W. Va., Parkersburg—City Council. Allen C. Murdoch, Mayor, received bids May 19 for grand stand, band stand, refreshment pavilion and implement bldg., City Park: Harry R. Nay, City Bldg., and T. T. Sansbury, 430 Juliana St., Asso. Archts.

#### **Dwellings**

Ala., Mobile—L. W. Moore and Miss Netti Arata, 359 St. Louis St., erect \$20,000 brick residence, 1000 block Springhill Ave.; 2 sto-ries and basement, 45x63 ft., hardwood and tile floors, comp. roof, steam heat; J. P. Roberts, Archt., First Natl. Bank Annex; bids in.

Ala., Montevallo—F. P. Givhan erect brick veneer residence; 1 story, 2 baths, pine, oak and tile floors, metal lath, shingle roof; Ye Planry, Inc., 1713½ Live Oak St., Dallas, Tex.; plans complete.

Ark., Hughes—J. O. E. Beck erect frame residence, Horseshoe Lake; 1 story, 40x100 ft., comp. roof, steam heat, tile baths: J. Frazer Smith, Archt., Goodwyn Inst. Bldg., Memphis, Tenn.

D. C.. Washington—Cooley Bros., 1405 K St., N. W., have permit for 12 dwellings, 212-34 Madison St., N. W.; 2 stories; total \$68,-000.

D. C., Washington—Wm. A. Boss, 1700 I St., N. W., has permit for 6 brick dwellings, 411-15 Franklin St. and 501-05 Montana Ave., N. E.; \$4500 each.

D. C., Washington—John Nelson has permit for 3 brick dwellings, 232-36 V St., N. W.; 2 stories; total \$12,000.

D. C., Washington—Mrs. F. H. Brooke, care F. H. Brooke, Archt. 1218 Connecticut Ave., N. W., erect brick residence, 3073 W St., N. W.; stone or cast stone trim, 3 stories, 80x56 ft., slate and slag roof, incinerator; bids in.

D. C., Washington—Geo. W. Cooper. 3800 New Hampshire Ave.. N. W., erect brick residence, 28th St., N. W.; 2½ stories, tile and linoleum floors, steel sash, tile and copper roof, hot water heat; Carey & Dowling, Archts., First Natl. Bank Bldg., Mobile, Ala.; bids ni.

Archts., First Natl. Bank Biug., Moune, Ala., bids ni.

D. C., Washington—Wyeth & Sullivan, Archts., 16 Jackson Place, N. W., soon complete plans for brick dwelling. Kalorama Circle, N. W.: stone trim, 2½ stories, hardwood and rubber floors. slate roof, elect. refrigeration, vapor heat, oil or gas burner. Fla.. Fort Lauderdale—J. Wesley Pape, care Vollite Products Co., 317 Sycamore St., Cincinnati, O., call for bids within few weeks for \$60,000 residence, garages, etc.: Francis Abreu, Archt., Perry Bldg., Brunswick, Ga. Fla., Little River, Miami—St. Marys R. C. Church, Rev. Father Roach, Pastor, erect rectory: V. H. Nellenbogen, Archt., 925 Lincoln Rd., Miami Beach—Clayton E. Shappell, 2014.

rectory: V. H. Nellenbogen, Archt., 925 Lincoln Rd., Miami Beach; drawing plans.
Fla., Miami Beach—Clayton E. Shappell, 12th St., plans \$25.000 residence, 30th St. and Flamingo Drive.

and Flamingo Drive.

Fla., Miami Beach—Joseph A. Vogel, reported, considers erecting \$30,000 residence, Ninth St. and Washington Ave.

ported, considers treating varieties, Ninth St. and Washington Ave.

Ga., Atlanta—Mrs. V. T. Massey. 569 Grisham Ave., S. E., erect brick veneer residence. 2025 Palifax Drive, N. E.; 1 story.

Ga., Atlanta—Geo. P. Murray, 65 Highland Drive, N. E., has low bid from Collins, Holdbrook & Collins, Atlanta Trust Co. Bidg., for residence: contract lately noted let; Geo. Harwell Bond, Archt., 1509 Candler Bidg.

5-14

Ga., Atlanta—S. D. McDaniel, 3398 Piedmont Rd., N. E. erect residence, Piedmont Rd.; Shingle. 2 stories and basement, conc. foundation, hardwood and tile floors, slote roof, steam heat; R. S. Monday, Archt. Norris Bldg.; receiving preliminary estimates.

Ga., Atlanta—Geo. A. Clayton Co.. Bona Allen Bldg., erect brick veneer dwelling. Havnes Manor, Monor Ridge Drive; 2 stories and basement. 9 rooms, 2 baths, lavatory, conc. foundation, hardwood and tile floors, slate roof, steam heat; J. M. Russell, Archt. Standard Bldg.; work probably start in few days.

Ga., Atlanta—Ivey & Crook, Archts. Can-

days.

Ga. Atlanta—Ivey & Crook. Archts. Candler Bldg., completed plans for 3 dwellings. Lenox Park. Herbert Kaiser. Sales Agent. C. & S. Bank Bldg.; Archts. advise plans will not be completed for some time.

Ga., Augusta—F. Arthur Hazard. Archt.. 232 Masonic Temple Bldg., erect 2 duplexes; stucco and frame and brick veneer and frame hardwood floors, comp. shingle roof. wrought iron railings, Vecto heating; bids May 20.

Ga., Tybee—John J. Owen and T. J. Knox ave site. Third Ave. and Ninth St., Savan-

Md., Baltimore—Dr. Walter Hughson, 1411 Eutaw Place, erect cinder block and brick

residence, Gibson Island; 2 stories and basement, rein. conc. floors, steel sash, slate roof; Taylor & Fisher, Archts., Balto. Trust Bldg.

Md., Baltimore—Mrs. Mary Horsull erect brick Colonial residence, Tunbridge Rd.; 2 stories, 35x30 ft.; Cyril H. Hebrank, Archt., 3 E. Lexington St.

Mo., St. Louis—Clara Leete erect residence near St. Louis Country Club; Study & Far-rar, Archts., Arcade Bldg.

Mo., St. Louis—Louise Leete erect residence ner St. Louis Country Club; Study & Farrar, Archts., Arcade Bldg.

Mo., St. Louis—Richardson Building Co., 5200 Nottingham St., erect 6 brick dwellings, 5227-45 Tholozan St.; 1 story, 27x44 ft., comp. roofs, hot air heat; total \$24,000.

N. C., Rocky Mount—C. A. Griffin, 502 N. Church St., erect brick residence; limestone trim, wood joist, 2 stories and basement, hardwood and tile floors, slate roof; Geo. R. Berryman, Archt., 102 W. Hargett St., Raleigh; bids in.

S. C., Aiken—Richard Howe, New York, erect \$75,000 residence; 2 stories with 1-story wings, brick, hollow tile and conc.; Willis Irvin, Archt., S. F. C. Bldg., Augusta, Ga.

Irvin, Archt., S. F. C. Bldg., Augusta, Ga. S. C., Aiken—Mrs. Eleanor J. Richards, Rye, N. Y.. erect winter residence, Augusta Highway, Highland Park.

S. C., Ritter—Arthur H. Caspary, 60 Broadway, New York, selected Willis Irvin, S. F. C. Bldg., Augusta, Ga., as architect for \$100,000 residence, Ashepoo River near Ritter; 2 stories, brick and hollow tile, slate roofs, water system, refrigerating machinery, oil heat, incinerators; supt.'s dwelling, servants' quarters, stables, garage, laundry, power house.

Tenn. Mamphis—Dr. W. B. Phys. 1466

power house.

Tenn., Memphis—Dr. W. R. Blue, 1460 Madison St., erect residence, Red Acres; brick veneer, 2 stories, 44x49 ft., tile baths, hardwood floors, comp. or tile roof, tile baths; Geo. Mahan, Jr., Archt., Manhattan Bank Bldg.

Tex., Houston—C. R. Colby erect \$20,000 residence, Inwood Drive and Chilton Rd., River Oaks; 2 stories, 11 rooms, brick or field stone; probably soon take bids.

Tex., El Paso—Edgar W. Burchard, New York, erect residence, 222 Pennsylvania Ave., Austin Terrace; Spanish type, 2 stories, 15 rooms, including 5 baths, wrought iron grills, 2-car garage and servants' quarters; O. H. Thorman, Archt., First Natl. Bank Bidg.

Thorman, Archt., First Natl. Bank Bing.
Tex., Kerrville—Presbyterian Church opens
bids May 23 at office A. W. Malin, Archt.,
Pampell Bldg., for manse: brick veneer,
rein. conc. foundation, 2 stories, 8 rooms.
5-7

Tex.. San Antonio—Carl Venth. T. W. C. Campus, Fort Worth, erect residence, Woodlawn Park; stucco, 1 story; plans being drawn by C. L. Browning, Jr., 1843 W. Gramercy St.

Va., Richmond—C. D. Flowers, 1411 Grove Ave., postponed erection of residence, Evelyn Byrd Rd., Westover Hills, until about Feb-

Va., Farmville — Mrs. James Lounsbury erect residence.

#### Government and State

D. C., Washington—Treasury Dept.. Jas. A. Wetmore, Act. Supvg. Archt.. Washington, D. C., has low bid at \$11,230 from Sprague & Henwood, Scranton, Pa., for filter unit for post office.

D. C., Washington—Navy Dept., Bureau of Yards and Docks, extend barracks, Washington Navy Yard; brick, conc., hollow tile, artificial stone, steel. iron, tin roofing: probably have plans ready in about 1 week.

D. C., Washington—Architect of The Capi-

D. C., Washington—Architect of The Capitol, David Lynn, has low bid at \$567,790 from McCloskey & Co., Inc., 1620 W. Thompson St., Philadelphia, Pa., for alterations to C Street Facade, Senate Office Building; Wyeth & Sullivan, Archts., 16 Jackson Place.

Ga., Fort Benning—Constructing Quarter-master, Capt. W. M. Allison, reported, prob-ably have plans ready in June for \$75,000 medical detachment barracks; brick, tile and stucco, 2 stories, tile roof.

stucco, 2 stories, tile roof.

Ga., Fort Benning—Additional prospective estimators on units E, F, G and H of Barracks No. 2, bids May 28 by Constructing Ouartermaster: D. W. Benson Plumbing Co., Auburn, Ala.: John C. Heslen (general), Carolina Bank Bidg.. Columbia. S. C.; Shapleigh Hardware Co.. 315 Washington St.; Mesker Bros. Iron Co., 427 N. Seventh

St., both St. Louis, Mo.; Capital Construc-tion Co. (general), Standard Bldg., Atlanta, Ga.; Tevis & Ingram, Inc., (general), Dan-ville, Ky.; Dorminey & Chastain, Rome, Ga.

ville, Ky.; Dorminey & Chastain, Rome, Ga.
5-14

Ky., Louisville—Additional prospective estimators on \$2,985,000 post office, court house and custom house, bids June 1 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington. D. C.: General Constr.—Schuler & MacDonald, 1723 Webster St., Oakland, Calif.; Gart-Cowen Construction Co., 15th and Dumesnil Sts.; L. W. Hancock; A. Markham Co.. 432 Floyd St., all Louisville, Ky.; Leo Michuda & Son, 10944 S. Michigan Ave.; John E. Ericsson Co., 123 W. Madison St., both Chicago, Ill.; Theriault Construction Co., 534 E. Johnson St., Philadelphia, Pa.; Chas. Shutrump & Sons Co., 1900 Euclid Ave., Cleveland, O.; North-Eastern Construction Co., Nissen Bldg., Winston-Salem, N. C.; Aronberg-Fried Co. Inc., 21 E. 42nd St., both New York; A. Clement Tobin & Co., 7235 Elmoro Ave., Richmond Heights, St. Louis, Mo.; Elevators—Haughton Elevator & Machine Co., care Mr. Keetcheson, Winston Hotel; A. B. See Elevator Co., Sio 18th St., N. W.; Otis Elevator Co., Sio 18th St., N. W., all Washingson; Kerschner Elevator Co., 918 Michigan St., Toledo, O.; Westinghouse Electric Elevator Co., 30th and Walnut Sts.; Atlantic Elevator Co., Stried A. S., General Elevator Co., 27 Fulton St.; Gurney Elevator Co., 109 W. 64th St., both New York.

La., Pineville—Constructing Quartermaster, Fort McPherson, Ga., has low bid from

La., Pineville—Constructing Quartermaster, Fort McPherson, Ga.. has low bid from Hodgson & Jones Construction Co., N. Perry St., Montgomery, Ala., for lodge, Alexander National Cemetery. 4-23

La., Mansfield — Treasury Dept., Jas. A. Wetmore Act. Supvg. Archt., Washington, D. C., opens bids in duplicate June 9 for post office; drawings from office Supvg. post Archt.

Md., Pikesville — Commanding General, Maryland National Guard, Armory Place and N. Howard St., Baltimore, receives bids un-til May 27 for stable, 110th Field Artillery; plans from above.

plans from above.

Md., Solomons—State Conservation Dept., Swepson Earle, Commr., 516 Munsey Bldg.. Baltimore, receives bids until May 30 for Chesspeake Biological Laboratory; \$40.000; Colonial type, brick, 3 stories and basement, 80x28 ft., slate roof, install pumps; specifications from Dept.; laboratory equipment later; plans by Wm. G. Johnson, care Owner; following contractors estimating: Mullan Contracting Co., 3945 Greenmount Ave.: Morrow Bros., Inc., Fidelity Bldg.; Pembroke Gastorovic: Century Construction Co., Hearst Tower bldg.; Sidney McCall, 3404 Marmon Ave., all Baltimore.

Miss. Mexidian. Treasury, Dont. Inc.

Miss., Meridian—Treasury Dept., Jas. A. Wetmore. Act. Supvg. Archt.. Washington, D. C., selected Krouse & Fort. M.-W. Bldg.. Meridian, as architects for post office and court house, 21st Ave. and Ninth St. 12-25 Mo., Lamar—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., reported, erect \$70,000 post office.

reported, erect \$70,000 post office.

Mo., Lebanon—Treasury Dept.. Jas. A.
Wetmore, Act. Supvg. Archt.. Washington,
D. C., drawing plans for \$70,000 post office.

Mo., Springfield—Department of Justices,
Sanford Bates. Director, Bureau of Prisons,
Washington, D. C., having plans drawn by
Francis Y. Joannes, and F. S. Marlow, both
420 Lexington Ave.. New York, for \$2,500,000
Federal prison hospital; plans probably ready
about July 1.

N. C., Fort Bragg—Prospective estimators

Federal prison hospital; plans probably ready about July 1.

N. C., Fort Bragg—Prospective estimators on hospital and utilities, bids June 2 by Constructing Quartermaster: Batson-Cook Co., West Point, Ga.; V. L. Nicholson Co., 120 W. Church Ave.; Worsham Bros., Empire Bldg., both Knoxville, Tenn.; York Construction Co., Fort Bragg; W. B. Barrow, Raleigh Bk. & Tr. Bldg.; W. H. Bond & Co., Inc., 318 S. Harrington St.; Bieman & Rowell. 401 W. Martin St.; Benj. F. McClamrock & Co., 223 S. West St., all Raleigh, N. C.; W. E. Rowan, Fayetteville, N. C.; Jewell-Riddle Co., Sanford, N. C.: Adams Construction Co., Woodward Bldg., Washington, D. C.; Consolidated Construction & Building Co., 4013 N. Mangum St., Durham, N. C.; Angle-Blackford Co., Amer. Exch. Natl. Bk. Bldg., Gerensboro, N. C.; W. P. Rose Co., Wayne Natl. Bank Bldg., Goldsboro, N. C.; W. T. Gregory, Law Bldg., Norfolk, Va.; John C. Heslep, Carolina Bank Bldg., Columbia, S. C.; Samford Bros., Inc., 301 Washington Ave., Montgomery, Ala.

Okla., Frederick — First Baptist Church ready to start work on brick, conc., stone

Okla., Frederick — First Baptist Church ready to start work on brick, conc., stone and steel bldg. to replace burned structure;

3 stories, 117x118 ft., conc. and steel joists, conc. foundation, cement asbestos shingle roof, cast stone, hardwood and linoleum floors, plaster board, asbestos shingle roof, steel sash and trim, gypsum, hollow and interior tile, brass and bronze work; Hawk & Parr, Archts., Cotton Exch. Bidg., Oklahoma City; A. H. Krause, Frederick, gen. contract at \$61,000, with additional material on site: equipment will not be purchased until Fall.

5. C. Beck Hill. Promosting estimators.

on site; equipment will not be purchased until Fall.

5.14

S. C., Rock Hill—Prospective estimators on elevators for post office, court house, etc.; bids June 3 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington. D. C. American Elevator & Machinery Co., Winston Hotel; Haughton Elevator & Machinery Co., 1103 Vermont St., N. W.; A. B. See Elevator Co., Inc., 1343 H St., N. W.; Olis Elevator Co., S10 18th St., N. W., all Washington; Westinghouse Electric Elevator Co., 20th and Walnut Sts.; Atlantic Elevator Co., Erie Ave. and D St., both Philadelphia, Pa.; Gurney Elevator Co., 109 W. 64th St.; Warsaw Elevator Co., 227 Fulton St., both New York; General Electric Co., Schenectady, N. Y. 5-14

Tex., Coleman — Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., has low bid at \$69,800 from Christy-Dolph Construction Co., Construction Bldg., Dallas, Tex., for post office.

Dallas, Tex., for post office.

Tex., Houston—Treasury Dept., Jas. A Wetmore, Act. Supvg. Archt., Washington, D. C., opens bids in duplicate June 16 for extension and remodeling (except elevators) of post office and court house; \$615,000; drawings from office Supvg. Archt.

Tex., Sweetwater—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., has low bid at \$78.800 from Christy-Dolph Construction Co., Construction Bldg., Dallas, Tex., for post office.

Va.. Fort Myer—Constructing Quartermaster. Room 2335, Munitions Bldg., Washington, D. C., opens bids June 16 for 4 double company officers' quarters with garages, and 6 double non-commissioned officers' quarters with garages, Fort Myer; information from Room 2336.

Va., Langley Field, Hampton—Construct-

Va.. Langley Field, Hampton—Constructing Quartermaster, Fort Monroe, Va., rejected bids for 2 Air Corps warehouses, Langley Field.

Va., Lynchburg—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., opens bids in duplicate May 29 for remodeling bldg. (old municipal bldg.) for post office; drawings from office Supvg. Archt. -7-1

modeling bug, tou municipal 2008, Archt. 7-1.

Va., Quantico—Additional prospective estimators on disciplinary barracks, U. S., Marine Barracks, bids May 27 by Navy Dept., Bureau of Yards and Docks, Washington, D. C.; N. C. Nelson, Inc., 853 Broadway; G. M. Gest, Woolworth Bldg., both New York; Angle-Blackford Co., Amer. Exch. Natl. Bank Bldg., Greensboro, N. C.; W. E. Rowan, Box 1011, Fayetteville, N. C.; J. F. Fitzgerald Construction Co., Inc., 38 Chauncy St., Boston, Mass.; bids June 3 by Navy Dept. for pump house, Marine Barracks, N. C. Nelson, Inc., 853 Broadway, New York, estimating, 5-14

#### Hospitals, Sanitariums, Etc.

Ga., Atlanta—Fulton County Comsn.. Wal-r C. Hendrix, Chmn.. will consider proposi-on to issue \$2,000,000 bonds for charity tion to hospital.

Ga., Savannah—Treasury Dept. Jas. A. Wetmore. Act. Supvg. Archt.. Washington, D. C., opens bids in duplicate June 5 for remodeling and enlarging U. S. Marine Hospital; drawings from office Supvg. Archt. 4-16

Ga., Waycross—Additional contractors estimating on \$150,000 hospital, bids May 25 by Ware County Bd. of Commrs.: Capitol Construction Co.. Standard Bldg., Atlanta, Ga.; J. L. Crouse, Amer. Bk. Bldg., Greensboro, N. C.; Morton Electric Co., Waycross, Ga.; W. C. Hinton. Cordella. Ga.; S. Ralph Fetner. Archt., 32 W. Forsyth St., Jacksonville. Fla.

ville. Fla.

Md., Catonsville, Baltimore—Spring Grove
State Hospital, Dr. Robt. E. Garrett. Supt.;
\$200.000 brick power house; Jas. Posey. Baltimore Trust Bldg., Baltimore, Engr.; Henry
Powell Hopkins, Archt., 10 E. Mulberry St.,
Baltimore.
4-30

Okla., Shawnee — Department of Interior, Office of Indian Affairs, Washington. D. C., receives new bids May 26 for \$60,000 infirmary, Shawnee Sanatorium.

mary, Shawnee Sanatorium.

Tex., Houston—City has offer from Mrs. Autry Kelley to erect additional unit to Autry Memorial Hospital School in Tuberculosis Hospital group. Buffalo and Shepherd Drives. provided city will build roads and walks and do some landscaping.

W. Va., Huntington—United States Veterans Bureau. Room 764. Arlington Bldg., Washington, D. C., receives bids in triplicate until June 23 for U. S. Veterans Hospital,

including roads, walks, grading and drainage; \$700,000, 152 beds; work includes excavating, rein. conc. constr., hollow tile, brick work, cut stone, cast stone, architectural terra cotta, marble work, floor and wall tile, rubbertile, compressed asphalt tile and linoleum floors, terrazzo, iron work, flag pole, steel sash, steel stairs with slate or soap stone and metal treads, steel shelving, cabinets and partitions, slate, metal and built-up roofing, lighting conductors, roof ventilators, metal lathing, plastering, sound deadening, carpentry, platform scales, metal weatherstrips, insect screens, window shades, painting, glazing, hardware, plumbing, boiler plant, radial brick chimney, heating and ventilating, elect. work, nurses' call system, fire alarm system; separate bids for (a) general, including radial brick chimney; (b) plumbing, heating, elect. work and outside sewer, water, gas, steam and elect. distribution systems; (c) elect. elevators; (d) steel water tank and tower; (e) refrigerating and lee making plant: drawings from Constr. Div., Room 764, Arlington Bldg.

#### Hotels and Apartments

La., Plaquemnie—Silber Brothers, Citizens Bank, let contract at \$48,300 to L. W. Eaton, Baton Rouge, for 3-story, brick, 50-room Central Hotel; Jones, Roessle & Olschner, Archts., Maison Blanche Bldg., New Orleans, 5-7

Tex., Willow Springs—H. L. Tucker erect 2-story, frame, 30-room hotel.

#### Miscellaneous

Miscellaneous

D. C., Washington—British Embassy, care Smith & Edwards, Archts, 1707 Eye St., N. W., receives bids May 28 for servants' cottage, laundry and garages; contractors estimating: F. L. Wagner, Inc., 10 L St., S. E.; Andrew Murray, 729 12th St., N. W.; Davis Wick Rosengarten Co., Inc., 1406 G St., N. W.; Bruce Clark; W. E. Mooney, 2539 Pennsylvania Ave., N. W.; C. H. Tompkins Co., 1608 K St., N. W.; C. E. Langley Co., 1509 Connecticut Ave., N. W.; Skinker & Garrett, Inc., 1719 I St., N. W.

Fla., Miami Beach—Beach and Tennis Club, T. William Brandon, Mgr., convert residence, Collins Ave., Lincoln Road and Ocean, into clubhouse, erect number of cabanas and men's locker room, two outdoor handball courts and two tennis courts; Russell T. Pancoast, Archt., 1139 Lincoln Road; bids in.

Fla., Miami Beach—Miami Beach Rod and

Archt., 1139 Lincoln Road; bids in.

Fla., Miami Beach—Miami Beach Rod and
Reel Club, Inc., 1704 Purdy Ave., erect additions to clubhouse: Henry J. Moloney. Archt.,
802 Professional Bldg., Miami.

La.. New Orleans—National Undertakers,
Inc., Dyas Bairy. Vice Pres. 716 Weiblen
St., organized with \$1.500.000 capital; soon
start work on 2-story, cathedral type funeral
home, containing 9 parlors. Canal St. between
Scott and Cortez Sts.; landscape work under
supervision U. J. Virgin, 914 Canal St.;
Emile Weil, Inc., Archts.. Whitney Annex.

W. Va.. Clarksburg—Clarksburg Country

W. Va., Clarksburg—Clarksburg Country Club rebuild clubhouse noted burned at loss \$35,000.

#### Schools

D. C.. Washington—District Commrs., R. L. Brennan, Ch. Clk., Engr. Dept., District Bldg., having plans prepared Phoebe Hearst School, 37th and Tilden Sts.; A. L. Harris, Municipal Archt., District Bldg., Ga., Dalton—Bd. of Education. W. C. Bowen, Chmn., Bldg. Comm., receives bids June 1 for \$30.000, one-story and basement, 174x55 ft., rein. conc., brick, struc. steel, hollow tile, terra cotta and limestone trim, 12-room and auditorium grammar school; tile and wood floors, stem heat; Daniell & Beutell, Archts., Georgia Savings Bank Bldg., Atlanta: following contractors estimating; J. F. Higdon. Silvey Bldg.; W. P. Francis, 201 Luckie St., N. W.; Ray M. Lee, Box 123, Station C. all Atlanta; Barrett Construction Co.; Brumbelow Construction Co., Griffin; Snellings Lumber Co., Phenix City. Ala. 4-9 Ga., Savannah—Chatham County Bd. of Education, O. B. Strong, Supt., postponed indefinitely erection of \$125.000 Junior High School; Levy & Clark, Archts., Blum Bldg.; Cletus W. Bergen, Asso. Archt., Liberty Bank & Trust Bldg.

Ga., Statenville—Echols County Bd. of Education erect one-story and basement, brick

& Trust Bidg.

Ga., Statenville—Echols County Bd. of Education erect one-story and basement, brick veneer high school; comp. roof; Lloyd Greer, Archt., Valdosta; bids in.

Arcnt., Valdosta; bids in.

La., Amite—Tangipahoa Parish School Bd.,
C. C. Pittman, receives bids June 16 for
\$25,000. 1½-story, 95x100 ft... brick school in
Eighth Ward; 8 classrooms and auditorium,
asbestos shingle roof; separate bids on steam
heating system and plumbing; Favrot & Livaudais, Archts., Hibernia Bank Bldg., New
Orleans.

4-23

Ky., Lexington—County Bd. of Education erect 2-room addition to school at Kenwick.

La., Lake Charles—Calcasieu Parish School Bd., H. A. Norton, Supt., selected Livesay & Weidemann, San Jacinto Life Bidg., Beau-mont, Tex., to prepare plans and supervise construction of high school to replace La-Grange High School near Lake Charles noted burned at loss of \$90,000.

La., Shreveport—Caddo Parish School Bd., E. Weldon Jones, Supt., receives bids June 10 for following school additions: \$60.000. 2-story, brick, 14-classroom addition to Fair Park School, Jones, Roessle, Olshchner & Weiner, Archts., Ardis Bldg.; \$20,000, 2-story, brick, 4-classroom additions to South Highlands and Creswell schools, Edw. F. Nield, Archt., City Bank Bldg., \$25,000 3-classroom and auditorium addition to negro high school.

La., Shreveport—Dodd College postponed opening date of bids on \$50,000 addition to brick dormitory; Clarence W. King, Archt., Giddens-Lane Bldg.

Md., Baltimore—Bd. of Awards rejected bids and soon call for new bids for \$250,000 West Baltimore Negro elementary school, Mount St. near Riggs Ave.; Buckler & Fenhagen, Archts, 525 N. Charles St.; Henry Massart, Struc. Engr., 328 N. Charles St.; James Posey, Mech. Engr., Baltimore Trust Bldg. 5-14

Md., Baltimore—School Commrs., Bureau of Maintenance, J. C. Siegel, 1230 E. 20th St., soon ready for bids for school repairs; separate bids on construction work, heating, plumbing, electric work and painting.

plumbing, electric work and painting.

Md., Baltimore—Bd. of Public Improvement Comsn., H. J. Leimbach, Supvg. Engr., City Hall, receives bids May 27 for \$60,000, 25 story, brick, fireproof, 6-classroom school, Morrell Park, Washington Blvd. and Spence St.; John J. Zink, Archt., 2826 Overland Ave.; Kubitz & Koenig, Struc. Engr., Emerson Tower Bidg.; James Posey, Mech. Engr., Baltimore Trust Bidg.; following contractors estimating: W. E. Bickerton Construction Co., 515 Cathedral St.; D. M. Andrew & Co., 26th and Sisson Sts.; Baltimore Co., 100 E. Pleasant St.; C. W. Schmidt and Century Construction Co., both Hearst Tower Bidg.: P. C. Street Engineering Co., 404 St. Paul St.; J. L. Robinson Construction Co., 522 Park Ave.; Lacchi Construction Co., Munsey Bidg.

Md. New Market—Frederick County Ed.

Md., New Market—Frederick County Bd. of Education, S. Lloyd Palmer, Supt., Frederick, having plans prepared by Frederick Bowers, Frederick, for \$45,000 one-story, brick

Miss., Laurel—Myrick Consolidated Public School Dist. votes June 2 on \$25,000 bonds for erecting, repairing and equipping school and teachers' home and for purchasing site; address Jones County School Bd.

Miss., Poplarville—Bd. of Trustees of Savannah School receives bids May 30 at office A. B. Nicholson, County Supt. of Education, for one-story, brick auditorium-gymnasium and two-classroom school addition; \$15,000, built-up comp. roof; Fowler Construction Co., Hattlesburg; L. E. and W. F. Breland, New Augusta, estimating; Vinson B. Smith, Archt., Bank of Gulfport, Gulfport.

Miss., Sturgis—School Bd., D. B. Horton, Sec., ready for bids about June 30 for \$40,000 high school to replace structure recently noted burned; one story, 90x130 ft., brick, hardwood floors, brick and conc. foundation, asbestos shingle roof.

Mo., Kansas City—Bd. of Education, E. C. Meservey, Pres., soon call for bids for Fairmount School addition; building will include auditorium and gymnasium, classrooms, dispensary, bookroom, kindergarten, vocational rooms and playground improvements; Charles A. Smith, Archt., Finance Bldg.

A. Smith. Archt., Finance Bidg.

Mo., St. Louis—Sisters of St. Mary, Mother Concordia, Superior General, approved plans by A. J. Widmer & Associates, Inc., 122 N. 7th St., and Study & Farrar, Arcade Bidg., for \$100,000 4½-sty., 94x46 ft. convent for sisternurses in connection with Firmin Desloge Hospital of St. Louis University under construction, Grand Bivd. and Vista Ave.; connect by tunnel with hospital, distance of approx. 100 ft.; Norman Rothenheber, Asso. Archt.

Mo., St. Louis—Bd. of Education, Emil J. Barth, Pres., remodel administrative offices of Board, \$12,000.

Okla., Nance—Nance School Dist. considering issuing \$25,000 bonds.

S. C., Charleston—Bd. of Education, George H. Moffett, Chmn., soon call for new bids for addition to high school for library and study ball.

Tenn.. Knoxville—Knox County School Bd., W. W. Morris, Supt., selected C. A. Tarwater, 517½ Union Ave., to prepare plans for re-modeling Gibb's school.

modeling Gibb's school.

Tenn., Nashville—Bd. of Education, Albert E. Hill. Pres., soon select site for \$500,000 senior high school on Gallatin Road; stadium to seat 10,000 people to be erected at rear of 12-25

Tex., Austin—University of Texas Bd. of Regents erect \$1,000.000 library, first of buildings to be constructed in proposed \$4,000.000 building program; Herbert M. Greene, La Roche & Dahl, University Archts., Construction Bldg., Dallas; Paul P. Cret, Conslt. Archt., 112 S. 16th St., Philadelphia. 5-7

Tex., Beeville—Beeville Ind. School Dist., Bd. of Trustees, John R. Beasley, Pres., recives bids May 25 for grade school, negroschool, gymnasium and repairs to senior high and grammar schools; brick, tile and reln. conc.; separate bids for plumbing, heating and wiring; Malcolm G. Simons, Builders Exchange Bldg., San Antonio, and Beeville, and W. C. Stephenson, Beeville, Asso. Archts.

Tex., Edna—Edna Ind. School Dist., Judge

Archts.

Tex., Edna—Edna Ind. School Dist., Judge S. G. Semple, Sec., School Bd., has low bid at \$47,437 from Wood Sherman Construction Co., Sherman Bldg., Corpus Christi, for one-story, U-shape, brick, tile and rein. conc. high school; Hardy & Curran, Archts.-Engrs., Nixon Bldg.; Lloyd D. Royer, Mech. Engr., Smith-Young Tower, both San Antonio. 4-30

Smith-Young Tower, both San Antonio. 4-30
Tex., Pettus—Pettus Common School Dist.,
Leroy Roberts, Pres., School Bd., ready for
bids about June 1 for one-story, brick, struc.
tile and rein. conc., 6-classroom, auditorium
and library school building; \$35,000 bonds
voted; Hamon & Co., Archts., Medical Professional Bldg., Corpus Christi. 4-30
Tex., Rio Grande—Rio Grande Ind. School
Dist., Oscar T. Vale, Sec., School Bd., receives bids May 28 (extended date) for \$40,000, one-story, brick and rein. conc. grammar
school; soon ready for bids for \$60,000, 2story, brick and rein. conc. high school; R.
Newell Waters, Archt., Weslaco; W. E. Simpson Co., Engr., Milam Bldg., San Antonio. 5-7
Va., Princess Anne—Princess Anne County

Va.. Princess Anne—Princess Anne County School Bd., Robt. J. Johnson, Supt., has low

bid from Miner & Miller, Norfolk, for ele-mentary school.

Tex., San Antonio—Bd. of Education, Mrs. J. E. King, Pres., receives bids May 28 for remodeling three buildings and erecting two buildings for vocational high school, Main Ave. and Romana St.; all fireproof; separate bids on plumbing, heating and wiring; approx. cost \$133,000; equipment, \$50,000; Harvey P. Smith, Archt., Natl. Bank of Commerce Bldg.; Phelps & Dewees, School Archts, Gunter Bldg.

Va., Salem—Roanoke County defeated \$350,000 bonds for building program; Roland E. Cook, Supt. of Schools. 4-16

#### Stores

Fla., Tampa—T. L. Stovall, 3207 Bayshore Blvd., and W. B. Baugh remodel Rialto Theatre on N. Franklin St. for store; begin work in about 10 days; \$10,000.

La., Lake Charles—Louis Sacker, 1918 Hodges St., expend \$40,000 for improvements to Alcede Bidg., 400 block Ryan St., for en-largement of meat market, opening of deli-catessen, and general retail produce house.

Miss., Louisville—J. Gordon ready for bids for store building; F. L. Livingston, Archt.

for store building; F. L. Llvingston, Archt.
Mo., Kansas City—Katz Drug Co., Boley
Bldg., leased south half of 6-story Boley
Bldg., renamed Katz Bldg.; convert into
separate store unit, served by own elevators,
stairways, heating and plumbing systems.

Tex., Houston—James Ruskin Bailey,
Archt., Public Natl. Bank Bldg., prepared
plans for A B C store, Harrisburg Blvd. and
Wayside Drive; one story, 70x100 ft., conc.;
blds in.

Tex. San Antonio—N. L. Casherry, erect

Tex., San Antonio—N. J. Casberry erect \$50,000. 125×70 ft., 6-store building. Blanco Road and W. Elsmere Ave.; tile, hollow tile and stucco; Walter H. Anderson, Archt., Travis Bldg.

#### Theatres

Va., Charlottesville—Virginia Players. University of Virginia. considering remodeling interior of Randall Hall for theater; \$15,000.

## BUILDING CONTRACTS AWARDED

#### Association and Fraternal

Md., Baltimore—Sons of Italy, Vincent Flaccomico, Chmn., Bldg. Comm., 2961 Frederick Ave., let contract to Ralph W. Simmers, 4547 Harford Road, for \$40,000 lodge bldg., 806-08 St. Paul St.; brick and conc., 4 stories and 1 story, 48x115 ft., rein. conc. hardwood, terrazzo and tile floors, conc. and brick foundation. steel deck built-up roof; limestone, marble, metal cellings, metal doors, rolling doors, steel sash and trim, hollow tile, wire glass; Bernard Evander, Archt., 20 E. Lexington St.; Herman Doeleman, Engr., Baltimore Trust Bldg.

Miss., Starkville—Ancient Free and Accepted Masons let contract to Chastang Construction Co., Jackson, for \$200,000 temple and theatre bldg.: brick, 2 stories: P. Krouse, Archt., M. & W. Bldg., Meridian; theatre leased to Goodman Bros., Starkville, for motion pictures.

#### Bank and Office

Tex., Fort Worth—Aviation Building Corp. finish interior of Seventh St. side for bank; 1 story and mezzanine, 24x50 ft., marble, tile, cement and linoleum floors, plate glass, marble base, Benedict nickel gates and doors, plaster walls, steel sash, Wyatt C. Hedrick, Inc., Archt., 1005 First Natl. Bank Bldg.; Jas. T. Taylor, Contr., 1203 Aviation Bldg.

#### Churches

D. C., Washington—Church of Jesus Christ of Latter Day Saints let contract to W. P. Lipscomb Co., 1406 G St., N. W., for \$200,000 Colonial type bldg., 16th St. and Columbia Rd., N. W.; stone, 1 story and mezzanine, 54x136 ft.; '56x30 ft. chapel to seat 300; 53x30-ft. recreation hall to seat 400; gymnasium, showers, locker and apparatus rooms in basement: kitchen; Young & Hansen, Archts. Sait Lake City, Utah; Don C. Young, Resident Archt.-Constr. Supvr., New Amsterdam Hotel, Washington.

#### City and County

Ala., Birmingham—Mrs. Katherine Comer, 1114 S. 16th St., let contract to J. F. Adams, 901 Cotton Ave., for brick veneer residence,

Mountain View Rd.; 1 story and basement, hardwood floors, tile or slate roof. tile bath; Miller & Martin, Archt., 911 Title Guar. Bldg.

Miler & Martin, Archt., 911 Title Guar. Bldg.

Ala., Birmingham—Following have equipment contracts for \$3,250,000 Jefferson County court house: Metal furniture and equipment, Jas. A. Head. Inc., 2021 First Ave., N.; Dixie Metal Products Co., Inc., 1000 N. 28th St.; Universal Metal Manufacturing Co., 1712 National St.; Dixie Bronze Co.; movable furniture, Zac Smith Stationery Co., 2014 First Ave., N.; Loveman, Joseph & Loeb, 212 N. 19th St.; bunks and beds, Hood-Wheeler Furniture Corp., 2013 Fourth Ave., N.; metal lamps, Matthews Electric Supply Co., 1121 First Ave., N.; jall kitchen equipment, Wimberly & Thomas Hardware Co., 2011 First Ave., N., all of Birmingham; Holabird & Root, Archts., 333 N. Michigan Ave., Chicago, Ill.; Harry O. Wheelock, Asso. Archt. Steiner Bldg., Birmingham; Southern Ferro Concrete Co., Contr., Atlanta Trust Bldg., Atlanta, Ga.

Ark. Tex., Texarkana—Miller County (Ark.)
Commrs. Court let contract to Oats Building & Construction Co. for \$125,000 jail; jail equipment, Southern Prison Co., 4500 S. Presa St., San Antonio, Tex.; fireproof, rein. conc., face brick, stone, terra cotta, 5 stories, elevators; Witt. Seibert & Halsey, Archts., Texark, Natl. Bk. Bldg. 5-14

La., Lake Charles—Calcasieu Parish Police Jury, W. S. Goss, Pres., let contract at \$16,-200 to P. Olivier & Son, 114 Bilbo St., for court house and fall repairs; R. S. McCook, Archt., First Natl. Bank. Bldg.

Md., Hagerstown — Washington County Commrs. let contract at about \$29,000 to Pauley Jail Building Co., 2215 De Kalb St., St. Louis, Mo., for jail equipment repairs.

St. Louis, Mo., for Jail equipment repairs.

Mo., Houston—Texas County Court, John
S. Stites, Judge, let contract to Geo. H. Gassman, Poplar Bluff, for court house to replace burned structure; brick and rein. conc. 1 story and basement, 95x70 ft.; \$40,000 bonds available; Johnson & Maack, Archts., 1004 Chemical Bldg.; Taxis & Becker, Conslt. Engrs., both Chemical Bldg., St. Louis. 4-2

Mo., St. Louis—Guaranteed Heating & Engineering Co., 1620 Chestnut St., has heating contract for \$150,000 police station; wiring, E. O. Dorsch Electric Co., 1418 Pine St.; plumbing, E. J. Fischer Plumbing Co., 4134

Westminster St.; jail equipment, Pauley Jail Building Co., 2215 DeKalb St.; oil burner, Becker-Marsden Co., 4470 Duncan Ave.; Klipstein & Rathmann, Archts., 316 N. Eighth St.; Taxis & Becker, Consit. Engrs., Chemical Bidg.; Woermann Construction Co., Contr., 3800 W. Pine St.

Tex., Jasper—Jasper County Bd. of Commrs let contract at \$27.915 to E. J. Miller.
1390 Live Oak St., Beaumont, for remodeling and 2-wing addition to court house; 2 and 3 stories; Marvin E. DeFee and Emory S. White, Archts., M. & M. Bldg., Houston. 4-9

#### **Dwellings**

Ala., Birmingham—T. Hanson, 5906 First Ave., N., let contract to J. I. Borriss, Comer Bldg., for stone veneer residence, Killough Springs: 1 story, 41x53 ft., comp. roof, steam heat; Jacob E. Salie, Archt., 508 Rob-ertson Rd.

Ala.. Birmingham—B. D. Rowland, 1307 S. 11th Place, erect \$10,000 stone veneer residence, Red Acres; 2 stories, 40x40 ft.. asbestos roof, hot air or steam heat; Jas. L. Gatling, Archt., 811 Bankers Mtg. Bldg.; Harvey Tappen, Contr., 1434 S. 28th St.

D. C., Washington—W. C. & A. N. Miller, 1119 17th St., N. W., have permits for 2 brick and frame dwellings, 4914 Glen Brook Rd., N. W., and 4301 Forest Lane, N. W.; 3 stories; total \$45,000; owners build.

3 stories; total \$45,000; owners duild.

D. C., Washington — Raymond T. Baber. Wardman Park Hotel, let contract to William P. Lipscomb Co., Dist. Natl. Bank Bldg., Washington, for \$500,000 residence. Foxhall Rd., N. W.; hollow tile, stone and brick. 2½ stories. 59x103 ft., tile and marble work, dumb waiters, hollow metal doors, vacuum heat, oil burner; Horace Trumbauer, Archt., 1406 Land Title Bldg., Philadelphia. Pa.

D. C., Washington—L. M. B. Inscoe, 2401 Trinlaw Rd., erect \$13,000 brick residence, 3730 W St.; 2 stories, slate roof, hot water heat; W. C. Nichol, Archt.; owner builds.

D. C.. Washington—District Construction Co., 605 Vermont Bldg., erect 5 brick and hollow tile dwellings, 5311-19 Third St., N. W.; 2 stories, slag roof, hot water heat; total \$30,000; owner builds.

D. C., Washington—Louise F. Moffett. 1902 Second St.. N. E., erect 2 brick dwellings. 5228-30 Nebraska Ave., N. W.; 2 stories, tin roof. hot water heat; total \$17,000: Geo. T. Santmyers, Archt., 1416 I St., N. W.; owner builds.

D. C., Washington—Mrs. C. H. Peek, care F. G. Wilcox, Archt., 4105 Wisconsin Ave., N. W., erect \$10,000 residence; brick, 2½ stories, 26x44 ft., slate roof, hot water heat; F. W. Horton, Contr., 215 Emerson St.

D. C., Washington—Wm. F. Betzell. 2215 Newton St., N. E., erect stucco residence. 3012 14th St., N. E.; 2 stories, slate roof, hot water heat; owner builds.

D. C.. Washington—G. S. Seek, 5318 41st St.. N. W., erect \$16,000 residence, 1400 Hemlock St.; 2½ stories, brick and hollow tile, slate roof, hot water heat; C. W. West, Archt.; owner builds.

Fla., Miami — Mrs. Sarah Wilsey, 1726
Michigan Ave., erect \$17,000 rein, conc., conc.
hlock and stucco residence and garage, 3580
Flamingo Terrace, tile and comp. roof, tile
and wood floors; R. E. Collins, Archt.; C.
R. Clark Co., Contr., both 925 Lincoln Rd.,
Miami Beach.

Fla. Miami—Chas. S. Boyd, Appleton, Wis.. let contract to St. John Co., Inc., 629 N. W. Seventh St., Miami, for \$70,000 residence, S. Bayshore Drive; rein. conc., conc. block and stucco, 2 stories, tile and wood floors, rein. conc. foundation, comp. and tile roof: Walter C. DeGarmo, Archt., S. E. Sixth St.; H. A. Baxter, Engr., both Miami. 5-7

Fla., Miami Beach—Tropical Homes, Inc., Contrs., 1108 Lincoln Rd., start work on dwelling during May.

Ga., Atlanta—Maddox & Tisinger, 730 Candler Bldg., erect brick veneer dwelling, 489 Shannon Drive, S. W.; 1 story, comp. roof, hot air heat; owner builds.

Ga., Atlanta—Reuben Gerbert, 534 Orme Circle. N. E., erect brick veneer residence, 1131 Virginia Ave., N. E.; 1 story, 9 rooms, 2 baths, hardwood and tile floors. comp. shingle roof. hot air heat; owner builds.

Ga., Atlanta—J. Kuniansky, 1042 W. College Ave., Decatur, erect 2 brick veneer dwellings 437-447 Hardendorf Ave., N. E.: 1 story, hardwood and tile floors, comp. roof, steam heat; owner builds.

Ga., Columbus—B. H. Hardaway, 1508 Third Ave., let contract to Williams Lumber

Co., Inc., 13th St., for brick, field stone and half-timber residence, Warm Springs Rd.; 2 stories and basement, 88x97 ft., conc. foun-dation, stone trim, slate roof; Smith & Big-gers, Archt., Murrah Bldg. 1-15

La., New Orleans—Sidney W. Boner erect double cottage, Jonquil St. and Franklin Ave.; O. F. Harang, Contr., 6008 Catina St.

La., New Orleans—Mrs. F. Reynoud erect frame residence. Jefferson Ave. near Cucullu St.; Paul G. Charbonnet, Contr., 830 Union St.

La., New Orleans—Edward I. Wetzel erect duplex, Franklin and Clover Sts.; 2 stories; O. F. Harang, 6008 Catina St., receiving sub-bids.

Md., Baltimore—Howard Jurgens, 605 Tunbridge Road, erect 2-story residence and 2-car garage. 5219 Putney Way, Homeland; Kenneth C. Miller, Archt.; Peyton B. Strobel Construction Co., Contr., both 206 E. Lexington St.

Md., Baltimore — Harry J. Green, Baltimore Trust Bldg., erect \$16 000 residence, 6304 Fordham Drive; stone and stucco, 2½ stories, 28x30 ft.; Kenneth C. Miller, Archt.; Peyton B. Strobel Construction Co., Contr., both 206 E. Lexington St.

Md., Baltimore—Milton R. Lerch, 5206 Harford Rd., erect 11 dwellings, 5200-20 Harford: brick, 2 stories; total \$40,000; owner builds.

Md., Baltimore—Jas. Keelty, Bldr., 2539 Edmondson Ave., has permit for 30 brick dwellings, 3900-28 and 4000-28 Gelston Drive, and 30 at 710-34 and 711-35 Mt. Holly St.; 2 stories, about 30x42.6 ft., 20.6x34 ft., slag roofs, steam heat; total \$141,000; Fredk. E. Beall, Archt., 306 St. Paul Place.

Md., Baltimore — Ralph A. Garner, Inc., Bldrs., 534 Wyanoke Ave., erect 10 dwellings, 3801-19 Ellerslie Ave.; 2 stories; total \$30,-

Md.. Baltimore—Louis A. Demely, 2234 Annapolis Road, erect \$10,000 residence, 2217 Annapolis Rd.; brick. 3 stories: B. H. B. Ennis, Jr., Contr., 1933 E. 31st St.

Md., Baltimore—American Building Co., John Kenndy, 5449 Jonqull Ave., erect 6 brick and stone dwellings, 5416-26 Narcissus Ave.: 2 stories.

Tenn., Memphis—Walter Chandler, Sterick Bldg., erect brick veneer and clapboard residence. Chickasaw Gardens: 1 story, about 70x50 ft: Dan Kuhlman. 2013 Courtland St., tentatively awarded contract.

Tex., Austin—Prof. F. B. Plummer erect conc., stone and hollow tile residence, Walling Drive. University Heights; 1 story and basement, 7 rooms, hardwood and tile floors, asbestos shingle roof; H. F. Kuehne, Arch. 808 Littlefield Bldg.; T. A. Webb, 1700 Sabine St., gen. contract at \$10,682.

Tex.. Fort Worth—Westover Hills Development Co. erect \$40,000 dwelling, garage and servants' quarters. Valley Ridge. Westover Hills: brick veneer, 2 stories and basement, 109x82 ft., steel sash, oak floors and trim, tile roof, metal lath, 4 tile baths, vacuum steam heat: Victor Marr Curtis, Archt.: Luther & Byrne. Contrs.; excavating; also erect \$32,000 dwelling, same location; 87x35 ft.; other details as above; same Archt, and Contrs.

Tex., Houston—W. Emmett Sampson, Vice Pres.-Gen. Mgr., Texas Construction Material Co., Petroleum Bldg., erect \$52,000 residence, River Oaks: steel frame: H. A. Sallsbury, Archt., Post-Dispatch Bldg.; Southwestern Construction Co., Contr., West Bldg.

Tex., Wharton—City let contract at \$20,-440 to Worrel & McKamey Construction Co., Electric Bidg.. Houston, for city hall; hollow tile, cast stone, stucco. rein. conc. frame, 1½ stories, 144x51 ft.. hardwood floors, conc. foundation. brass and bronze work, tar and gravel roof; Raymond W. Davidson, Archt., Wharton.

Va. Fredericksburg—John L. Pratt erect \$150,000 residence, Rappahannock River near Fredericksburg: fireproof: Lee, Smith & VanDervoort. Archts., Sixth and Franklin Sts.; Allen J. Saville, Inc., Contr., Electric Bidg., both Richmond.

#### Government and State

Ala.. Maxwell Field. Montgomery — Constructing Quartermaster. Maxwell Field. let contract at \$38,089 to Algernon Blair. First Natl. Bk. Bldg.. Montgomery, for 3 double sets non-commissioned officers' quarters; conc., tile and wood, 2 stories and basement, 37x56 ft., wood floors, conc. foundation, tile roof.

Ala., Maxwell Field, Montgomery—Constructing Quartermaster, Maxwell Field, let contract at \$137,866 to Samford Bros., Inc., 301 Washington Ave., Montgomery, for detachment barracks and hospital, fire station and guard house and post exchange.

Md., Baltimore—Maryland National Guard, Armory Place and N. Howard St., let contract to J. Geo. Bensel Co., 3005 Shannon Drive, for repairs and improvements to 5th Regiment Armory. W. Hoffman St. 4-23

Va., Fort Humphreys—L. F. Waldrop Co., Rock Hill, S. C., has \$20,000 plumbing and heating contract for \$150,000 hospital, Fort Humphreys; Jewell-Riddle Co., Contr., Sanford, N. C.

ford, N. C. 5-7

Va., Langley Field, Hampton—Following sub-contracts let on 20 double non-commissioned officers' quarters, and on 3 Air Corps barracks, all Langley Field, Townsend Lumber Co., Gen. Contr., N. Towers St., Anderson, S. C., excavating: Heating and plumbing, W. T. Eubank, 3101 Jefferson Ave., Newport News, Va.; elect. work, S. J. Watson, Jr., 16 E. Queen St., Hampton, Va.; plaster and stucco Roth & Nelson, 844 Blue Ridge Court, Atlanta, Ga.; marble, tile, terrazzo and slate, S. I. Bean, Tile and Marble Co., Temple Court, Asheville, N. C.; roofing and sheet metal work. Arrow Roofing & Sheet Metal Works, 5100 St. Jean St., Detroit, Mich. 4-30 and 5-7

#### Hospitals, Sanitariums, Etc.

Ala., Tuscaloosa—Moffatt Machinery Manufacturing Co., 510 W. Third St., Charlotte, N. C., has elevator contract at \$18.456 for \$1,100,000 U. S. Veterans Hospital; York Ice Machinery Corp., Belmont and Thompson Sts., Philadelphia, Pa., refrigeration contract at \$16.420; steel water tank and tower, Chicago Bridge & Iron Co., 1616 Walnut St., Philadelphia, at \$7840; plumbing, heating and electric work, Bryce Plumbing & Heating Co., Florence, S. C., at \$232.477; H. B. Nelson Construction Co., Gen. Contr., 1201 Owsley Ave., Columbus, Ga.

Ark., DeQueen—Dr. C. A. Archer erect brick and hollow tile hospital, Third St. and Gibson Ave.: 1 story and basement, 36x100 ft. with 18x20-ft. wing, 20 beds, steam heat, 2 operating rooms; W. B. Gatlin, Contr.

ft. with 18x20-ft. wing, 20 beds, steam heat, 2 operating rooms; W. B. Gatlin, Contr.

La. New Orleans—Additional sub-contracts let on 8 personnel quarters, \$300,000. U. S. Veterans Hospital: Struct. steel, Ingalls Iron Works, Co., 720 Fourth Ave., S., Birmingham, Ala.; plumbing and heating, Sciambra & Masino, Inc., 636 N. Broad St.; millwork, National Sash & Door Co., Inc., 600 N. Dupre St.; elect. work, Barnes Electrical Construction Co., Ltd., 513 Gravier St.; glass and glazing. Jas. B. Crasto Glass Co., 2004 Adams St.; orna. and misc. iron., James R. Sutton, 4724 Banks St.; hardware, R. D. Pitard Hardware Co., Inc., 214 Camp St.; marble. Southern Builders Material Co., Inc., Maison Blanche Bidg.; steel windows, Modern Appliance Co., Inc.; tile work, Eugene J. Zimmermann, 1721 Carondelet St.; nainting, Gus Peterson, 730 Valence St., all New Orleans; screens, Cory Metal Products Corp., Cory, Pa.; plastering, Jacobson Plastering Corp., Candler Bidg., Atlanta, Ga.; creosote lumber, American Creosote Works, Inc., 1305 Dublin St., New Orleans; R. P. Farnsworth & Co., Inc., Gen. Contrs., Maritime Bidg., New Orleans. See Want Section—Building Material and Equipment.

Material and Equipment.

Mo., Jefferson City—St. Marys Hospital let contract at \$142.323 to Wimmer Contracting Co. for fireproof addition: heating, \$9000, Elliott & Barry Engr. Co., 4060 W. Pine St.; plumbing, \$14.801, McNamara Plumbing Co., 5000 Wabado St.: elect. work, \$5896, E. O., 5000 Wabado St.: elect. work, \$5800 Wabado St.:

Tex.. Waco—A. J. Rife Construction Co., 1931 N. Harwood St., Dallas, Tex.. has contract at \$113.900 for steel tank and tower, \$1.500.000 U. S. Veterans Hospital: Henry B. Ryan Co., Contr., 500 N. Dearborn St., Chicago, Ill.

#### Hotels and Apartments

D. C.. Washington—C. J. Harnett. erect five 2-story, brick. flats. 1214-26 Staples St., N. E., and 1331 Neal St., N. E.; slag roofs, hot water heat. \$40 000; C. W. Gosnell. Bldr., both 1727 K St., N. W.

both 1727 K St., N. W.

Fla., Miami Beach — Martha and Charles
Meyers, 927 Fourth St., erect \$20,000, 2-story,
rein. conc. block and stucco, 10-apartment
building. Pennsylvania Ave. and Sth St.;
V. H. Nellenbogen, Archt., 925 Lincoln Road;
owners build; day labor.

4-16

Mo., St. Louis—C. Holtzman, 4446 Delor
St., has permit for 2-story, 35x42 ft., brick
tenement, 4014 Leona St.; tar and gravel

roof, steam heat; Art-Bilt Construction Co., Bldr.; C. E. Stevens, Archt., both 5417 S. Grand Ave.

Tex., San Antonio—J. H. Bradley, 315 W. Lullwood St., let contract to Ed. Mitchell, for 2-story, 50x70 ft., tile and natural stone, 4-unit apartment; I. G. Morrow, Archt., both 220 Travis Bldg.

#### Miscellaneous

Miss., Bay St. Louis—John T. McDonald and associate completed foundation for 50x-100 ft. amusement pavilion; maple floors suitable for skating and dancing; work by owner assisted by Edw. Osborn.

N. C., Winston-Salem—Thurmond Chatham. ounty Club, let contract to James G. Baird o., for \$100,000 club; Harold Macklin, rcht., both Reynolds Bldg. Co., 10 Archt.,

Tex., Dollas—Dr. Jas. T. Downs, Jr., 915
Praetorian Bidg., completed foundation for
\$40,000. 2-story, 60x171 ft., brick, stone trim
undertaker's establishment, 3611 Ross St., for
Geo. W. Brewer: cement and oak floors,
Johns-Manville built-up roof, cast stone, electric refrigerators, elevators, hardwood and
tile floors, limestone, interior tile, ventilators;
E. A. Randle & Son, 1921 Greenville St., contract at \$32.483; Carsey & Linskie, Archts.,
2012 N. Harwood St.; R. O. Jamieson, Engr.,
S. W. Life Bidg.

W. Va., Elm Grove, Wheeling—George Selbert, 145 Springdale Ave., let contract to Elm Grove Building Material Co., Vencelotte Bldg., for 50x100 ft., limestone restaurant, terrazzo fioors; Frederic and Phillip V. Faris, Archts., 1117 Chapline St.

#### Schools

Ark., Bradford—Bradford Special School Dist. Bd. of Directors let contract at \$24,250 to Nelson & Woodson, Russellville, for 2-story and basement, brick and steel, 14-room and auditorium school; Erhart & Elchenbaum. Archts., 112½ W. Third St., Little Rock. 5-14 Ark., Van Buren—School Bd. soon start work on \$25,000 annex to Van Buren High School; provide study hall, classrooms and library; Brassham & Wheeler, Archts., Kennedy Bldg., Fort Smith; John Blevins, Contr., Van Buren.

Contr., Van Buren.

D. C., Washington—Catholic University erect 2½-story, brick and hollow tile Sisters' House: Hugh Council, Contr., 5519 Kansas Ave.; Michael Heister, Archt., Hill Bldg.

D. C., Washington—District Commrs., R. L. Brennan, Ch. Clk., Engr. Dept., District Bldg., let contract at \$49,975 to Bahen & Wright, 916 Rhode Island Ave., N. E., for 4-room addition and alterations to Francis Scott Key School; Albert L. Harris, Municipal Archt.

Fla. Goulds—Dade County Bd. of Public

Fla., Goulds—Dade County Bd. of Public Instruction. James Mitchell, Chmn. Miami, let contract at \$10,249 to M. H. Connally, 1540 S. W. First St., Miami, for \$16,000. 6-room school near Goulds.

let contract at \$10.249 to M. H. Connally, 1540 S. W. First St., Miami, for \$16,000, 6-room school near Goulds.

Ga., Galnesville—Brenau College let contract to C. W. Puckett, \$55 Moreland Ave., S. E., Atlanta, for alterations to building, 1004-8 Peachtree St.

Ga., Mitchell—School Bd., O. L. Kelley, erect one-story and basement, 6-room and auditorium, brick veneer school; tin and comp. roof: F. Arthur Hazard, Archt., 2056 McDowell St., Augusta; day labor under supervision of M. L. Benson.

Ky., Louisville—Following sub-contracts awarded on elementary school in Garden Acres Subdivision for which H. G., Whittenberg, 320 S. Sixth St., has general contract at \$215 300: Excavating, F. G. Breslin, 32nd and Market Sts., Louisville sheet metal, J. F. Wagner Sons Co., 1600 S. 10th St.; millwork, Southern Planing Mill Co., 830 S.1 15th St.; glazing, Pittsburgh Plate Glass Co., 16th and Main Sts.; hardware, Belknan Hardware & Mfg. Co., 647 S. First St., al Louisville; rein. steel, Jones & Laughlin Steel Corp., Pittsburgh, Pa.; cut stone, Alexander King. Bloomington, Ind.; J. M. Colley, Archt., 8th and Chestnut Sts. 5-14

La., Baton Rouge—East Baton Rouge Parish School Bd., W. H. Perkins, Chmn., Bldg. Comm., let contract at \$57.500 to Clifford H. King, Prescott Lane, for additions to Istrouma School; Lewis A. Grosz, Archt., Reymond Bldg.

mond Bldg. 5-7

La., Baton Rouge—Following sub-contracts awarded on group of dormitories at Louisiana State University for which J. V. & R. T. Burkes, Inc., 1112 American Bank Bldg., New Orleans, and N. Boulevard, Baton Rouge, have general contract at \$281.225. Rein. steel. Donovan windows. Laclede Steel Co., Arcade Bldg., St. Louis, Mo.; casement sash, Campbell Metal Window Corp., 1 Pershing Square, New York: Weiss Dreyfous & Seiferth, Inc., Maison Blanche Bldg., New

Orleans, and Wogan & Bernard, Canal Bank Bldg., New Orleans, and Old Reymond Bldg., Baton Rouge, Asso. Archts.

La., Greensburg—St. Helena Parish School Bd., J. M. Breeden, Supt., let contract at \$9953 to W. W. Kemp, Amite, for school at Pine Grove; hardwood floors, asbestos shingle roof; Tom Sharky, Archt., Amite.

Pine Grove; hardwood floors, asbestos shingle roof; Tom Sharky, Archt., Amite.

La., New Orleans—Following sub-contracts awarded on 10-story Louisiana State University Medical Center for which R. P. Farnsworth & Co., Inc., Maritime Bidg., has general contract at \$529,189: Struc. steel, Jones & Laughlin Steel Corp.; hardware, Gibbens & Gordon, Inc., 532 Canal St.; ready mixed conc., J. J. Clarke & Co., Inc., 1601 Julia St.; cabinet and millwork, screens (aluminum), Riecke Cabinet Works, 4201 Tulane St.; aluminum windows, Truscon Steel Co., Canal Bk. Bidg.; roof, Taylor Seidenbach, Inc., 1401 Tchoupitoulas St.; vault door, Diebold Safe & Lock Co., 527 Carondelet St.; glass and glazine. Pittsburgh Plate Glass Co., 314 Girod St.; sheet metal work, Standard Sheet Metal Works, 1153 Tchoupitoulas St.; plastering, Moroney & Middleton, Canal Bank Bidg.; terrazzo, American & Venetian Terrazzo Co., 615 Julia St.; painting, Walter Scrimshaw, 4300 Ella St., all New Orleans; limestone, Bedford Cut Stone Co., Bedford, Ind.; glazed terra cotta, Northwestern Terra Cotta Co., 2525 Clyburne Ave., Chicago, Ill.; granite, Cold Spring Granite Co., Cold Spring, Minn.; rein. steel, Laclede Steel Co., Arcade Bidg.; aluminum sills, bronze, Usona Manufacturing Co., 3510 Chouts St., both St. Louis, Mo.; orna. iron, Birmingham Ornamental Iron Co., Inc., 417 W. Pinson St., Birmingham, Ala.; Weiss, Dreyfous & Seiferth, Inc., Archts., Maison Blanche Bidg. 49

Md., Baltimore—Following sub-contracts awarded on 10-classroom, brick addition to

mental Iron Co., Inc., 417 W. Pinson St., Birmingham, Ala.; Weiss, Dreyfous & Seiferth, Inc., Archts., Maison Blanche Bldg. 4-9

Md., Baltimore — Following sub-contracts awarded on 10-classroom, brick addition to School No. 20, under construction (foundation to first floor level) for which The Lacchi Construction Co., Inc., 522 Munsey Bldg., has general contract at \$102,904: Plumbing, heating and ventilating, Geo. H. Schaffer, 4017 Falls Road; struct. steel and misc. iron, Baltimore Steel Co., Eastern Ave. and Eden St.; limestone and granite, David M. Andrew Co., Sisson and 26th Sts., all Baltimore; electric wiring, C. Ridgely Emory, 300 Chesapeake Ave., Towson.

4-9

Mo., Columbia—Kappa Sigma Fraternity, University of Missouri, Ross Dunwoody, Joplin, Chmn., Bldg. Comm., started work on \$75,000 fraternity house.

Mo., St. Louis—Bd. of Education, Emil J. Barth, Pres., let contract at \$261,611 to M. I. Fleischer, 7310 Kingsberry St., for 2-story, brick and rein. conc., 16-classroom Woerner grade school, Bowen and Leona Sts.; wardrobes, \$4500, K-D Supply Co., 21 S. 4th St.; plumbing, sewering and gas fitting, \$14,997. Thomas J. Sheehan Co., 2233 Olive St.; heating and ventilating, \$46,300, Elliott & Barry Engineering Co., 4060 W. Pine St.; vacuum cleaning system, \$3104, Koppen-Smith Heating Co., Inc., 2628 Olive St.; electrical wiring, \$12,930, A. Wallace Van Nort, Ry. Exch. Bldg.; lighting fixtures, \$4796, Butler-Kohaus, Inc., 2823 Olive St.; also let contract at \$8249 to S. G. London, Ry. Exch. Bldg., for installing wading pools at group of schools.

Tenn., Memphis—Bd. of Education, G. W. Garner, Sec., let contract at \$89,213 to H.

Tenn., Memphis—Bd. of Education, G. W. Garner, Sec., let contract at \$89,213 to H. A. McGuire, Dermon Bldg., for 2-story, brick, stone and rein. conc., fireproof Bethel Grock School; steam heat; plumbing, \$5985, Fisher Plumbing & Heating Co.; electric, \$3085, Dawkins Electric Co.; Henry J. Kramer, Archt., Goodwyn Institute Bldg.

Va., Amherst—Fred B. Fuqua & Co., Krise dg., Lynchburg, have contract for school Bldg., L building.

Bidg., Lynchburg, have contract for school building.

Va., Charlottesville—Following sub-contracts awarded on 3-story, rein. conc., struc. steel, brick and tile Clark Memorial Law Bidg., at University of Virginia, excavation completed, for which Johnson Construction Co., Law Bidg., Norfolk, has general contract at \$271,567: Brick work, Ralph F. Bryan; granite work, Sisler Bros., Inc., both Harrisonburg; cast stone, Economy Concrete Co., Central Natl. Bank Bidg.; struc. steel, Richmond Structural Steel Co., Inc., 17th and Dock Sts., both Richmond; roofing and sheet metal work, Spann & Hill. 718 Granly St.; plumbing, B. L. Williams, Inc., 318 Hamilton Ave.; electrical work, Wm. A. Burckard Co., Inc., 60 Commerce St., all Norfolk; millwork, Charlotte Wood Working Manufacturing Co., W. Palmer St., Charlotte, N. C.; rein. steel, Truston Steel Co., Youngstown, Ohio; marble work, Hilgartner Marble Co., Sharp and Ostend Sts., Baltimore; heating and ventilating, Poe Piping & Heating Co., 108 S. Main St., Greenville, S. C.; elevator, Salem Foundry & Machine Works, Salem; painting, The William Wilson Co., Inc., Bona Allen Bldg., Atlanta, Ga.; plans by architectural Comsn., John K. Peebles, Chmn., Law Bldg.. Norfolk.

Va., Port Richmond—Blessed Sacrament Roman Catholic Parish, Rev. J. S. Laubowski.

Pastor, let contract by J. W. Atkinson, Richmond, for one-story, 120x102 ft., 4-classroom, library, office and auditorium school and 2-story, 40x33 ft. convent; A. Byron Williams, Archt., Citizens & Marine Bank Bldg., Newport News. story, 40x3 Archt., Citi port News.

Va., Powhatan—Powhatan County School Bd. erect 2-story and basement, 106x125 ft., brick high school; 10 classrooms, study hall and auditorium, manual training and shop; H. D. Moring, Contr., Farmville; Fred A. Bishop, Archt., Electric Bldg., Richmond. 5-7

Va., Williamsburg—J. W. Davis, Law Bldg., Newport News, has contract for two \$25,000 sorority houses at William and Mary College; Charles M. Robinson Architects, Times-Dispatch Bldg., Richmond.

#### Stores

Ala., Huntsville—S. H. Kress & Co., 114
Fifth Ave., New York, let contract to G. A.
Miller & Co., Tampa, Fla., for \$100,000, 2story and basement, rein. conc., brick, tile
and struc. steel store; stone trim, built-up
roof; plans by Edw. Sibbert, Company Archt.

Ga., Atlanta—Asa G. Candler, Inc., let contract to H. J. Carr Construction Co., both Candler Bldg., for 2-story and basement, 30x-124 ft., limestone and brick, fireproof store and office building, Mitchell and Forsyth Sts., to be occupied in part by Citizens & Southern Natl. Bank; comp. roof, tile and terrazzo oors; Hentz, Adler & Shutze, Archts. Candler Bldg.

Ga., Savannah—R. J. Whalley, Inc., 404 E. Bay St., have contract for \$50,000 improvements to building, Broughton St. between Rull and Whitaker Sts., for Pauline Meinert; W. T. Grant & Co., Lessee, 455 Seventh Ave., New York.

Ga., Thomaston—R. E. Hightower let contract to Alvah Nelson Lumber Co. for improvements to store; brick, plate glass front,

La., New Orleans—National Air Control Co., 30 N. Dearborn St., Chicago, has contract at \$82,000 for installing air pressure system in \$2,500,000, 5-story and basement, 100x200 ft., rein. conc., steel, brick and tile, limestone and granite department store for Jas. K. Feibleman Realty Co. to be occupied by Feibleman-Sears, Roebuck & Co.; B-W. Construction Co., Gen. Contr., 720 Cass St., Chicago: Moise H. Goldstein, Archt., American Bank Bldg., New Orleans.

La. New Orleans—T. A. Pittman Contr.

La., New Orleans—T. A. Pittman, Contr., 2305 Almonaster Ave., ready for sub-bids on electric, sheet metal, painting, paving and plastering in connection with erection of drug store on Franklin Ave.

Md., Westport, Baltimore—Louis A. Demely, 2234 Annapolis Road, let contract to B. H. B. Ennis, 1933 E. 31st St., Baltimore, for 2-story, brick store and apartment; Bernard Evander, Archt., 20 E. Lexington St., Baltimore.

Mo., St. Louis—Garland Co., 410-12 N. Sixth St., leased 5-story, brick store, and remodel; \$12,000; Nat Abrahams, Archt.; Nat Abrahams, Inc., Bldr., 717 Equitable Bldg. Tex., Austin—Marie Antoinette Shop. Nick Ferris, remodel store building on Congress Ave. between 7th and 8th Sts.; \$10,000, new front, plate and black glass, tile vestibule entrance, interior to include mezzanine, decorative and orna. plaster walls and ceiling, pine floors, new plumbing and wiring; Scott Yeaman, Contr., 508 West Ave.

#### Warehouses

La., New Orleans. Louisiana Bldg., has contract at \$9125 for 2-story. 75x80 ft., brick and stucco warehouse. 854-58 Tchoupitoulas St.; comp. roof, metal skylights, sprinkler system; Theard & Matthews, Archts., Balter Bldg.

#### \$15,000,000 Louisiana Road Bonds

Baton Rouge, La.-Bids for the purchase of \$15,000,000 Louisiana highway bonds will be opened June 15 in the office of the State Highway Commission in this city. Bidders are requested to name the rate of interest the bonds will bear in multiples of one-quarter of one per cent, not exceeding 5 per cent. The bonds will be dated May 1, 1931.

#### THE CLASSIFICATIONS IN THIS SECTION ARE:

# WANT **SECTION**

Machinery and Supplies

Building Materials and Equipment

Bids Asked

Under this heading are reported and Equipment Includes bids asked by U. S. requests for data, prices and lit- This division comprises all classes Government, States, districts, requests for data, prices and lit-erature and information on ma-chinery, supplies and miscellan-ment used in building and con-uals for machinery, materials, eous materials of a wide variety. struction projects of every kind. supplies and construction work.

ltems in this department are published without charge and these columns are open for the publication of wants of all kinds relating to construction work, machinery, materials and supplies.

#### Machinery and Supplies

Cane Mills and Sorghum Making Equipment.—L. F. Ervin, Scotts, N. C.—Wants prices and data from manufacturers of cane mills and equipment for making sorghum, including boilers, etc.

Gyratory Crusher. — Lawrence Manning (Mchy. Dealer), 824 Juniper St., N. E., Atlanta, Ga.—Wants prices and data on 30-in. gyratory crusher, standard make, used; must be in good condition.

Paper Making Machinery.—Decatur Box & Basket Co., Inc., Decatur, Ala.—Wants prices and data from manufacturers on machinery for making paper from wood pulp.

Pebble Mill.—E. B. Hauenstein, Main and Market Sts., Lincoln, Pa.—Wants prices and data on used pebble mill with motor attached, for pulverlzing tobacco.

Road Building Materials and Equipment.— Engineer Birger Dahlberg, A. Johnson & Co., 64 Water St., New York—Wants prices and catalogs on materials and equipment for grading and surfacing roads and constructing conc. and asphalt pavements; after June 1 address Birger Dahlberg, Postbox 7171, Stockholm 7, Sweden.

Snow Plows.—Carolina Tractor & Equipment Co., S alisbury, N. C.—Wants prices, data and distributors discounts from manufacturers on snow plows for Model "A" Ford

Storage Tank.—Southeastern Mills, Inc. (Flour, Meal. etc.), 51-100 Long St., Athens, Tenn.—Wants 15,000 or 12,000 gal, storage tank.

Woodworking Machinery.—O. H. Thomason, Crestview Building & Supply Co., Crestview. Fla.—Wants prices and data on woodworking machinery such as endless belt sanders and portable sanding machines; wants prices and data on new and used woodworking machines, such as sanders, shapers etc. shapers, etc

shapers, etc.

Nash Robinson & Co., 1600 Franklin Ave., Waco, Tex., rebuilding burned warehouse and sheds and wants prices on following:

(1) Elevator—2 ton capacity
(2) Platform Scales—3600 lb. capacity
(3) Wagon Running Gear—3 ¾ -in. with standards for lumber
(4) Warehouse Trucks.

R. E. Haynes, Beverly Hills, Burlington, N. C., plans opening machine shop and wants prices and data on following:

(1) Drill—24 to 30 in., self feed, with back gear

gear
(2) Lathe (Engine)—24 to 30 in. with 6-ft. twin centers.

TY. S. Foo, Director, Bd. of Public Works, Chunghking Municipality, Szechwan, China, undertaking street improvement projects and wants prices and data on road building equipment such as following:

(1) Asphalt Paving Machinery
(2) Concrete Mixers
(3) Graders

(3) Graders
(4) Rock Drills—with portable air compres-

(5) Road Rollers (Steam)
(6) Tractors and Trailers.

#### Miscellaneous

F. R. Mac Neill, Sanford, Fla.—Wants prices and data on following: (1) Cylinders—spun metal, 3-in. diam. x 4½-in. thickness, 1/16-in. bottom and

(2) Stamping (Cylindrical)—sheet metal, 3-in. diam. x 4½-in., of 1/16-in. stock bottom and sides.

#### Building Material and Equipment

A. H. Krouse, Contr., Frederick, Okla., wants prices on following for \$61,000 church: Stone ing-hardwood, linoleum

Cast Stone
Flooring—hardwood, linoleum
Plaster Board
Roofing—asbestos shingle
Steel Sash and Trim
Hile—gypsum. hollow, interior
Brass and Bronze Work.

R. P. Farnsworth & Co., Inc., Maritime Bldg., New Orleans. La., estimating on post office, Lumberton, Miss., desire bids on all sub-contracts until May 29; also estimating on post office, Opelousas, La., and desire bids on all sub-contracts until June 1.

bids on all sub-contracts until June 1.

The John W. Cowper Co., Inc., Engrs. and Contrs., State Planters Bank Bidg., Richmond, Va., estimating on general contract for addition to Sylvania Industrial Corp., building Fredericksburg, and wants subbids and prices until May 25.

Reinforcing Bars.—State. C. S. Hammett, State Engr., 208 E. Forsyth St., Jacksonville, Fla., requests bids for 50 tons round \$\frac{1}{2}\sigma\_1\$ in hard, deformed reinforcing bars, delivered f. o. b. cars, Raiford, Fla., A. C. L. R. R.

#### Bids Asked

Bids Asked

Airport.—War Dept., Office of Constructing Quartermaster, Fort Monroe, Va.—Bids June 11 for furnishing labor and material and performing all work for filling and grading for extension of flying field, Langley Field; information on application.

Airport Lighting.—Office of Chief, W. S. Erwin, Div. of Purchase and Supplies, Dept. of Commerce, Washington, D. C.—Bids June 12 for installation of lighting facilities on New Orleans-Atlanta Airway; work located between New Orleans. La, and Atlanta, Ga., via Mobile and Montgomery, Ala., and consists of installing about 34 standard airways rotating beacons. together with all accessories, such as about twenty 10x14 ft. power and service sheds, twenty-six 2½ kw. engine generators, four 3 kv-a. engine generators, sas well as about 65,000 ft. of No. 8 and No. 10 duplex Parkway cable and 250 boundary lights in boundary lighting systems at about 7 intermediate fields with day markers, etc., at field and beacons; 2 beacons mounted on municipal water tank towers about 125 ft. high and on 51 ft. steel skeleton towers; information on application to Commr. of Lighthouses.

Airplane Hangars, etc. — Office of Constructing Quartermaster. Fort Manroe Valence of Constructing Quartermaster.

Lighthouses.

Airplane Hangars, etc. — Office of Constructing Quartermaster, Fort Monroe, Va.—Bids June 15 for construction of 11 air corps hangars, annexes, connecting bays, and boiler houses at Langley Field; information on application.

Balustrade. — District Commrs., District Bidg., Washington. D. C.—Bids May 25 for reconstructing portion of stone balustrade on Q St. bridge.

Boilers, etc.—Ch., Bureau of Yards and Docks, Navy Dept., Washington, D. C.—Bids June 10 for installing boiler, stokers and foundations, Navy Yard, Washington.

Blue-Printing Machine.—See Miscellaneous Machinery and Tools.

Bridges.—State of Virginia—Bids for 3 bridges. See Construction News—Roads. Streets and Paving.

Bridge. — Kentucky. See Construction News—Roads, Streets and Paving. Bridges.—State of Missouri—Bids for 41 bridges. See Construction News—Roads, Streets and Paving.

Bridges.—State of West Virginia—Bids for 3 bridges. See Construction News — Roads, Streets and Paving.

Building Material.—U. S. Engr. Office, Huntington, W. Va.—Bids May 25 for building material for U. S. Lock 3, Big Sandy River.

River.

Cable. — Commanding Officer, Submarine Mine Depot, Fort Monroe, Va.—Blds May 29 for 160 miles 1-conductor cable.

Castings.—District Commrs., District Bldg., Washington, D. C.—Bids May 26 for iron furnace castings, fittings.

Cement.—U. S. Engr. Office, 1006 McCall Bldg., Memphis, Tenn.—Bids June 11 for approx. 240,000 bbl. American Portland cement in cloth bags.

Chains.—U. S. Engr. Office, Huntington.

Chains.—U. S. Engr. Office, Huntington, W. Va.—Bids May 27 for chains for Great Kanawha River.

Clothing. — Quartermaster Depot, U. S. Army, Washington, D. C.—Bids May 29 for citizens' outer clothing as required during fiscal year 1932.

Clothing.—Office of Quartermaster, Fort Oglethorpe, Ga.—Bids May 26 for civilian clothing as required during fiscal year 1932.

Coal.—Supt. of Lighthouses, New Orleans, La.—Bids June 2 for bit. steam coal delivered to bunkers of vessels at Mobile, Ala., during fiscal year July 1, 1931, to June 10, 1932.

Chests.—Chief of Engrs., U. S. Army, Munitions Bldg., Washington, D. C.—Bids May 26 for 255 demolition chests, 75 carpenters' chests (platoon).

Derrick Boat. — U. S. Engr. Office, P. O. Box 45, Jacksonville, Fla.—Bids June 3 for steel derrick boat.

Dishwashing Machine.—Commanding Officer, Washington Quartermaster Depot, 20th and C Sts., Washington, D. C.—Bids May 26 for dishwashing machine.

Drill, etc. — Marine Corps, Q. M. Dept., Washington, D. C.—Bids May 26 for drill, etc., delivery Quantico, Va.

Electric Equipment.—David Lynn, Archt. of Capitol, Washington, D. C.—Bids June 9 for new electric equipment in Library of Congress, Washington, D. C., including complete installation of cables to old feeders, providing temporary switchboard and connecting cables thereto, removal of old conduit and cables and repair of existing work affected thereby.

Electric Cable, Lumber.—Bureau of Supplies and Accounts, Navy Dept., Washington, D. C.—Bids May 26 for furnishing electric cable and lumber to Navy Yard, Wash-

Elevator.—Office of Indian Affairs, Interior Dept., Washington, D. C.—Bids May 25 for elevator at Shawnee, Okla.

Electrical Material—Headquarters Third Corps Area, 311 St. Paul Pl., Baltimore, Md.—Bids May 25 for electrical material, delivery Acting Harbor Defence Engr., Fort Monroe, Va.

Elevator Repairs.—U. S. Dept. of Agriculture, Alex. McC. Ashley, Ch., Div. of Purchase, Sales and Traffic, Washington, D. C.—Bids June 19 for remodeling or replacing elevator machinery and for replacing elevator shaft enclosures in east and west wings Main Building, Washington, D. C.

Fuel Oil.—Quartermaster Supply Officer, Fort Sam Houston, San Antonio, Tex.—Bids June 1 for 758,000 gal. fuel oil.

Furniture.—Commrs. of Indian Affairs, 506 Spruce St., St. Louis, Mo.—Bids May 29 for reed furniture, 142 sets davenports with 2 chairs to match, 173 chairs and 240 bedside tables.

Gasoline and Kerosene.—Marine Corps, Q. M. Dept., Washington, D. C.—Bids May 25 for 64,000 gal. gasoline and 12,000 gal. kerosene, deliveries Port au Prince and Cape Hatien, Haiti.

Gas Heaters.—Div. and Post Quartermaster, Fort Sam Houston, San Antonio, Tex.—Bids May 26 for 371 radiant gas heaters.

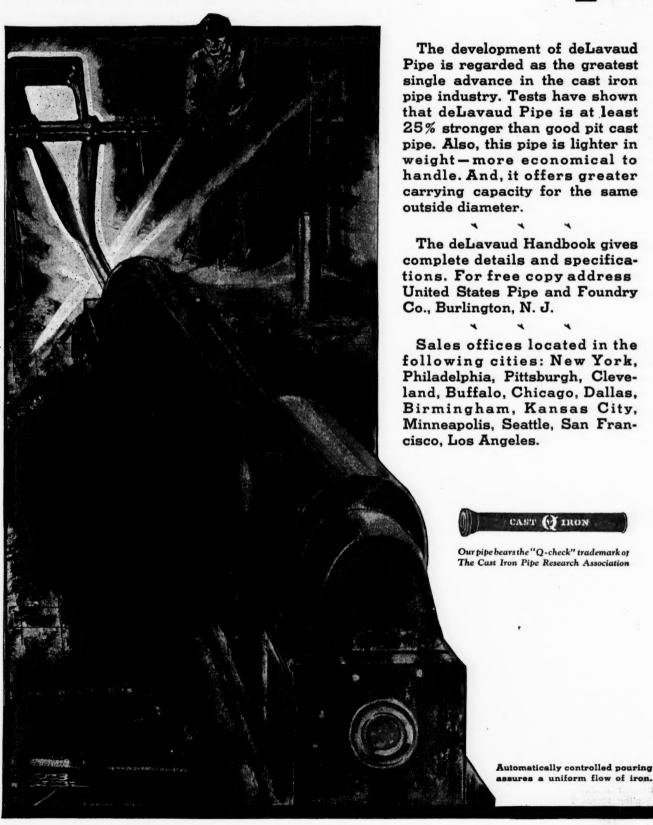
Generators and Lathe.—Ch. of Ordnance, Artillery Div., Washington, D. C.—Bids May 25 for electric generator and motor-driven lathe.

Headstones.—Quartermaster General, War dept., Washington, D. C.—Bids June 9 for pprox. 29,000 headstones and for reinscribapprox. 29,000 ling headstones.

Hose (Water, Pneumatic and Suction).— Marine Corps, Q. M. Dept., Washington, D. Cl—Bids May 26 for furnishing water, pneumatic and suction hose, delivery Quan-tico, Va.

Launches.—U. S. Engr. Office. Jacksonville, Fla.—Bids May 27 for constructing and de-livering affoat 3 54-ft. double screw gasoline launches.

# U.S. de Lavaud Pipe



Lawn Mowers.—Quartermaster Depot, 20th and C Sts., N. W., Washington, D. C.—Bids June 10 for 4 hand guided power mowers and 1 traction drawn power mower.

Levee.—U. S. Engr. Office, P. O. Box 667, Vicksburg, Miss.—Bids June 10 for constructing approx. 13,388,000 cu. yd. earthwork, east and west banks of Mississippi River, Miss., Ark., and La. See Construction News—Miscellaneous Construction.

Lift Trucks and Paltforms.—Marine Corps, Q. M. Dept., Washington, D. C.—Bids May 25 for 2 lift trucks, and 2 platforms, delivery Quantico, Va.

ery Quantico, va.

Miscellaneous.—Panama Canal, Office of Gen. Pur. Officer, Washington, D. C.—Bids May 28 for following, Sch. 2655.

Marine-type gasoline engines, air compressors, marine-type electric generators and centrifugal water pumps.

Miscellaneous Machinery and Tools.—Bureau of Supplies and Accounts, Navy Dept., Washington, D. C.—Bids June 2 for motor driven blueprinting machine and portable electric scaling hammers; bids June 9 for reamer and machinists' chisels.

reamer and machinists' chisels.

Miscellaneous.—Panama Canal, Office of Gen. Pur. Officer, Washington, D. C.—Bids June 8 for following, Sch. 2657:

Cast iron soil pipe, galv. malleable iron fittings, brass fittings, cast iron flanges, malleable iron unions, ball cocks, brass bibb cocks, curb cocks, stop cocks, gate valves, brass globe valves, bronze pressure reducing valves, hose couplings, etc.

Oars and Pike Poles.—U. S. Engr. Office, Huntington, W. Va.—Bids May 25 for oars and pike poles, Great Kanawha River and U. S. repair station.

Pier Repairs.—City, Buildings Engr., Mu-nicipal Bldg., Baltimore, Md.—Bids May 27 for resurfacing roof deck of Broadway Pier.

Pipe. — District Commrs., District Bldg., Washington. D. C.—Blds May 28 for 800 ft. 12-in., 110 ft. 15-in., 150 ft. 18-in., 400 ft. 24-in. and 110 ft. 42-in. corrugated galv. iron

Pumping Unit.—Dist. Commrs., Room 509 Dist. Bldg., Washington, D. C.—Bids May 26 for furnishing, delivering and erecting 20,000,000 gal. electric driven centrifugal pumping unit at Bryan St. Pumping Station; information on application Room 427 Dist. Bldg.

Reamers and Chisels (Machinists').—See Miscellaneous Machinery and Tools. Reinforcing Fabric.—U. S. Engr. Office, 1006 McCall Bldg., Memphis, Tenn.—Bids June 4 for 50,000 pieces reinforcing fabric

June 4 for 50,000 pieces reintercing labeled for conc. slabs.

Roads.—State of Virginia—Bids for 15 roads. See Construction News—Roads, Streets and Paving.

Roads.—State of Maryland—Bids for 5 roads. See Construction News—Roads, Streets and Paving.

Road.—Quantico, Va. See Construction
News—Roads, Streets and Paving.
Roads.—State of Missouri—Bids for 77
roads. See Construction News—Roads,
Streets and Paving.
Road.—Corsicana, Tex. See Construction
News—Roads, Streets and Paving.

Road.—Corsicana, Tex. See Construction News—Roads, Streets and Paving.

Roads.—State Highway Dept., Dover, Del.—Bids June 10 for 4 roads: Cont. 172, Whitehall neck Road-Mott's Corner, 3.30 mi., 13,000 cu. yd. excavation, 5000 cu. yd. borrow, 3450 cu. yd. cement conc. pavement, 1950 lin. ft. expansion joint, 7000 lb. reinforcement, 5000 lin. ft. wood shoulder curb, 840 lin. ft. R. C. pipe; Cont. 186, Port Penn-Delaware City, 3.674 mi., 12,000 cu. yd. excavation, 4000 cu. yd. borrow, 100 tons broken stone base course, 6100 cu. yd. cement conc. pavement, 18.500 lin. ft. longitudinal metal joint or 18.500 lin. ft. longitudinal metal joint or 18.500 lin. ft. longitudinal metal joint or 18.500 lin. ft. panasion joint, 1200 lb. reinforcement, 880 lin. ft. R. C. pipe, 100 lin. ft. relaid pipe, 13.000 lin. ft. %-in. wire cable guard rall, 8000 lin. ft. wood shoulder curb; Cont. 189, Brown's Church-Middleford, 3.515 mi.. 10,000 cu. yd. excavation, 4500 cu. yd. borrow, 3540 cu. yd. cement conc. pavement, 2000 lin. ft. expansion joint, 1200 lb. reinforcement, 770 lin. ft. R. C. pipe, 2000 lin. ft. %-in. wire cable guard rail, 4000 lin. ft. wood shoulder; Cont. 195, 191,700 sq. yd. surface treatment, 28 mi.

Roads.—State of Tennessee—Bids for 2 roads. See Constructon, News.—Roads

surface treatment, 28 ml.

Roads.—State of Tennessee—Bids for 2
roads. See Construction News—Roads,
Streets and Paving.

Roads.—State of Kentucky—Bids for 3
roads. See Construction News—Roads,
Streets and Paving.

Roads.—State of West Virginia—Bids for
roads. See Construction News—Roads,
Streets and Paving.

Scaling Hammers.—See Miscellaneous Machinery and Tools.

Sodium Bicarbonate.—Marine Corps, Q. M. Dept., Washington, D. C.—Bids May 26 for 2400 lb. sodium bicarbonate, delivery Quantico, Va.

Street Oiling.—Sebastian, Fla. See Con-struction News—Roads, Streets and Paving.

Stump Puller.—Marine Corps, Q. M. Dept., Washington, D. C.—Bids May 25 for stump puller, delivery Quantico, Va.

Trunnion Pipe, etc.—U. S. Engr. Office, P. O. Box 45, Jacksonville, Fla.—Bids May 29 for trunnion pipe, one inner collar, one trunnion bearing and one outer collar.

Water Works.—City of Thomasville, Ga., D. Rhett Pringle, Supt., Water and Light—Bids June 8 for furnishing materials and constructing water softening plant; 1,500,000 gal. daily capacity; Wiedeman and Singleton, Engrs., Candler Bldg., Atlanta, Ga.

water Works.—City of Cumberland, Md., and Evitts Creek Water Co., George C. Young, Pres.—Bids May 27 for construction of New Evitts Creek Dam, bridge across the dam, relocation of roads in the reservoir area and all appurtenant work; dam site lies in Valley of Evitts Creek, in Bedford County, Pa., about 2 miles north of Gordon Dam, about 12 miles north of Cumberland; dam is a solid conc. gravity type with maximum height of about 90 ft. and length of 726 ft.; bridge across the dam is a rein. conc. arch bridge with a 22 ft. wide roadway and two 4 ft. sidewalks; relocated roads are to be 18 ft. wide and graded 24 ft. wide and include necessary drainage, culverts, etc., and have total length of about 2 miles; complete sets of plans, specifications, etc., can be obtained from office of The J. E. Greiner Co., Conslt. Engrs., 1201 St. Paul St., Baltimore.

Wheels.—Marine Corps, Q. M. Dept., Wash-

St. Paul St., Baltimore.

Wheels.—Marine Corps, Q. M. Dept., Washington, D. C.—Bids May 25 for 5 sets wheels for tractors, delivery Hampton Roads, Norfolk, Va., and Philadelphia, Pa.

Wire Guards.—Ch., Bureau of Yards and Docks, Navy Dept., Washington, D. C.—Bids June 3 for wire guards, Quantico, Va.

Wire Strand (Galvanized). — U. S. Engr. Office, McCall Bildg., Memphis, Tenn.—Bids June 3 for galv. wire strand; approx. 650,000 lb. ½ in., 750,000 lb. ½ in., 100,000 lb. 5/16 in. and 250,000 lb. ½ in., 100,000 lb. Winch.—U. S. Engr. Office, P. O. Box 1017, Memphis, Tenn.—Bids May 25 for winch.

Wire Rope.—U. S. Engr. Office, Huntington, W. Va.—Bids May 28 for wire rope.

#### Trade Literature

Structural Steel Data.-In the interest of simplification and standardization of wide flange structural steel sections, the Bethlehem Steel Corporation, Bethlehem, Pa., the Carnegie Steel Company, Pittsburgh, and the Illinois Steel Company, Chicago, have revised their respective groups, with a view to making them as nearly interchangeable as mill conditions and economical operations will permit. Information as to these revisions, with tables and other data, is presented in the Pocket Companion, Abridged Edition, 1931, now being distributed by the companies.

Steel Swimming Pools.—The Hammond Iron Works, Warren, Pa., manufacturers and exporters of steel tanks and steel plate construction, are offering a swimming pool of steel plate welded construction, made in diameters and depths to suit conditions. The pools, briefly described and illustrated in a leaslet issued by the company, are adaptable to private homes, country clubs, schools and municipalities.

Centrifugal Pumps .- The Hayton Pump & Blower Division of the International-Stacey Corporation, Connersville, Ind., has issued bulletin No. 160-B10 on Hayton centrifugal pumps, featuring the open impeller type multistage unit.

School Shop Storage.-The Durabilt Steel School Shop Storage.—The Durabit Steel Locker Company, Aurora, Ill., manufactur-ers of lockers, storage and wardrobe cab-inets have issued a booklet "Steel Storage Equipment for the Modern School Shop."

Armco Storm Sewers.—This is the title of a new catalog, now ready for distribu-tion by the Armco Culvert Manufacturers Association, Middletown, Ohio, which de-scribes the use and installation of storm sewers for all types of drainage.

Virginia Sand and Gravel.-The sand and gravel resources of the Coastal Plain of Virginia are described in Bulletin 32 issued by the State Commission on Conservation and Development, Richmond, and the Virginia Geological Survey, University of Virginia, Charlottesville.

Light and Power Statistics.—The National Electric Light Association, New York, is distributing a statistical supplement to the "electric light and power industry in the United States." It is a reprint from N. E. L. A. publication 1106 and has been revised to January 1, 1931.

Crawler Wheels .- The Trackson Company, Milwaukee, Wis., has issued a bulletin devoted to Trackson Crawler Wheels, built in 6-ton, 10-ton and 15-ton capacities, figuring 2 complete wheels to each assembly. The wheels are of high grade alloy steel, heat treated for long life, with provision for renewing worn

Canning Machinery and Supplies.—A. K. Robins & Company, Inc., Baltimore, Md., manufacturers and distributors of canning machinery and supplies, have issued a large new catalogue devoted to machinery and supplies for canning various fruits, vegetables, citrus fruits, etc. All types of the company's equipment are fully illustrated.

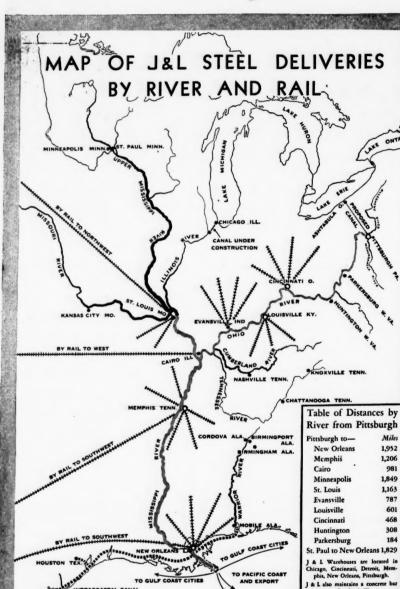
Truck-Grader and Spring-Scraper.—The Willett Manufacturing Company, Grand Rapids, Mich., is distributing folders illustrating and describing Willett truck-graders and spring-scrapers for road construction and maintenance. Trucks equipped with the Willett equipment are said to work rapidly and efficiently.

Control Cars.—The Atlas Car & Manufacturing Co., Cleveland, Ohio, has issued bulletin No. 1239, devoted to automatic and remote control cars for fuel and material handling. The former suggests a unit fully automatic in operation, which is said to be in successful service. Remote control cars, con-trolled by a single operator at a control station, have also found many applications.

Hoists and Dump Bodies.—The Commercial Shearing & Stamping Company, Youngstown, O., has issued bulletins 101 and 102. The former is devoted to 3-Way hydraulic hoists, Prest-Steel rear dump bodies, etc.; the latter illustrates and describes Prest-Steelite rear dump bedies, Safety-Slant hy-draulic hoists and Model F1½ 3-Way dump bodies, designed and manufactured for light truck chassis.

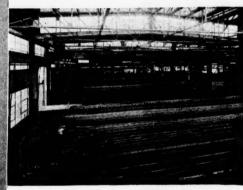


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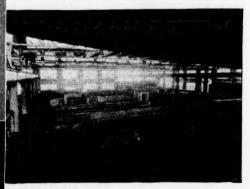




THE CENTURY TOW — One-hundredth shipment of J&L steel products, as it left the J&L Works, Alequippa, Pa., April 16, 1930, for Memphis and New Orleans, with stops scheduled at principal cities on the Ohio and Mississippi Rivers.



Structural shapes bay, J & L New Orleans Warehouse



Stock of steel plates in J & L New Orleans Warehouse

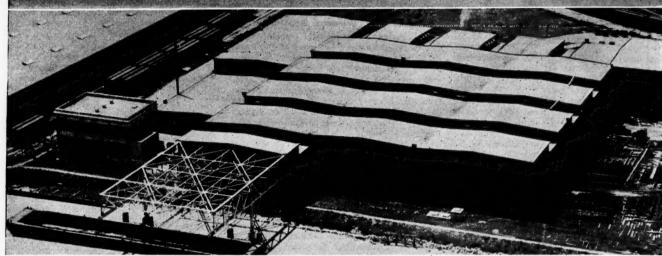


**GULF OF MEXICO** 

View of fabricating shop, which is a part of the J&L Warehouse at New Orleans.



# OF J&L SERVICE EXPANDS



# A NEW ORLEANS WAREHOUSE

The acquisition of the Lukens Steel Company warehouse and fabricating shop at New Orleans gives the Jones and Laughlin Steel Corporation greatly augmented facilities for customer service. New Orleans will be served locally; customers in the south and southwest, on the Pacific Coast, and in foreign countries will be served by rail, water and water-rail transport. The purchase of the Lukens plant is a logical step forward in the development of the J & L system of river and river-rail distribution of manufactured steel products to cities along the Ohio and Mississippi Rivers and to inland points in the South, Southwest and West. The service that this New Orleans warehouse will render to its territory will be the same type which has proved so helpful and satisfactory to the steel buyers served by J & L Warehouses at Pittsburgh, Detroit, Cincinnati, Chicago and Memphis.

The New Orleans warehouse consists of four bays for steel stocks and, in addition, a fabricating shop, and a two-story brick office building. It is situated on 17 acres fronting on the turning basin of the Industrial Canal. All equipment is modern and complete. The plant will be utilized for warehousing merchant bars, structural shapes, plates, concrete bars, cold finished steel, special shapes, junior beams, wire, nails and other J & L products.

Served directly by river from Pittsburgh, this new base at the mouth of the Mississippi River substantially expands the scope of J & L Service, bringing to yet another territory the many advantages that J & L Warehouse service invariably gives.

## **J&L** STEEL PRODUCTS

(Open Hearth and Bessemer Steel)

HOT ROLLED PRODUCTS
Billets Blooms Slabs Sheet Bars Skelp Bands
Flats Hexagons Rounds Squares

Angles Beams Channels Tees Zees
Agricultural Shapes
Light Weight Stair Stringer Channels
Plates for Bridges, Tanks, Boilers, Cars and Ships

RAILROAD SPIKES TIE PLATES
Light Rails and Accessories

BARS FOR CONCRETE REINFORCEMENT (Straight, Bent and Fabricated)

FORGING STEEL

JALCASE STEEL
Hot Rolled Cold Finished

Rounds Squares Hexagons Flats Special Shapes
Free Cutting Screw Stock
Shafting
(Turned and Ground, Turned and Polished, Cold Drawn)
Pump and Piston Rods

JUNIOR BEAMS

STEEL PILING

FABRICATED STRUCTURAL WORK
Columns Girders Trusses Plate Work Tanks
Steel Barges Mill and Factory Buildings

TUBULAR PRODUCTS
Standard Pipe
Line Pipe
Casing, Tubing, Drive and Rotary Drill Pipe
in Lapwelded and Seamless

WIRE PRODUCTS
Wire Rods
Bright, Annealed and Galvanized Wire
Spring Wire Barbed Wire Woven Fencing
Bright, Coated and Galvanized Nails
Fence Staples
Netting Staples

TIN MILL PRODUCTS
Coke Tin Plate Black Sheets (Tin Mill Sizes)

COKE BY-PRODUCTS

# & LAUGHLIN STEEL CORPORATION

AMERICAN IRON AND STEEL WORKS

JONES & LAUGHLIN BUILDING, PITTSBURGH, PENNSYLVANIA

Soles Offices: Atlanta Boston Buffalo Chicago Cincinnati Cleveland Dallas Denver Detroit Prie Los Angeles Memphis Midwaukee Minneapolis New York Philadelphia Pittsburgh St. Louis San Francisco Washington Washeescen CHICAGO CINCINNATI DETROIT MEMPHIS NEW ORLEANS PITTSBURGH Canadian Representatives: JONES & LAUGHLIN STEEL PRODUCTS COMPANY, Pittsburgh, Pa., U. S. A., and Toconto, One., Canadian Representatives:

## INDUSTRIAL NEWS

#### Celebrates Golden Jubilee

Completing a half-century of activity in the manufacture of deep-well pumps and well supplies, A. D. Cook, Inc., Lawrenceburg, Ind., affirms that its development has been "coincident with the growth of the South during the last fifty years." In 1881, A. D. Cook built the first factory to manufacture Cook patent brass tube well strainer, which was used in deep-well construction at Memphis and other Southern towns and cities. This strainer led the company to the manufacture of working barrels (deep-well cylinders) and plunger pumps of the steam head type. As electricity came into general use, deep-well power heads of various designs were also developed.

#### The Whitcomb Locomotive Company

The Whitcomb Locomotive Company, Rochelle, Ill., which recently took over the George D. Whitcomb Company, is owned by the Baldwin Locomotive Works of Philadelphia; the new company will operate as a self-contained unit and will carry on the policies of the company it succeeds. The present arrangement places the Whitcomb company in a favorable situation, as its manufacturing and sales policies will be identified with those of the Baldwin organization, which is this month celebrating a century of successful operation.

#### Will Make Earth Moving Machinery

The Blaw-Knox Company, Pittsburgh, Pa., manufacturers of steel products, have acquired exclusive sales and manufacturing rights of the Ateco line of earth moving machinery for the United States east of the Rocky Mountains and for all other countries. The rights were obtained from the American Tractor and Equipment Company, Oakland, Calif., the line including hydraulically operated earth movers, bulldozers, scarifiers, tamping rollers and combination outfits.

#### Offers Furniture Factory

A complete furniture factory of the Peerless Furniture Manufacturing Company, located just outside the city limits of McGehee, Ark., is offered for sale by B. C. Pickens, Walnut Lake, Ark., trustee. The plant is on the Missouri Pacific Railroad, occupying a site of 13 acres, with side track, and consists of new machinery, dry kilns and other facilities.

#### Steel Filing Cabinets

Filling Devices, Inc., which has been operating as a partnership under the name of Steel Transfer Case Company is the name of a new company recently incorporated at Aurora, Ill., to manufacture steel filing cabinets, transfer cases, card cases, sand-tables, waste-baskets and special steel filing equipment. The incorporators are J. M. Unick, J. C. Unick and J. B. Lindstrom.

#### Moves Dallas Office

The Dallas, Texas, office of the Chicago Bridge & Iron Works, Chicago, Ill., manufacturers of Horton steel tanks, has been moved to the Burt Building. This office, in charge of H. B. Murphey, handles all sales work for the company in the Southwest and erection work in the entire South.

#### Reading Iron Company Appointments

J. K. Aimer was recently appointed assistant general manager of sales of the Reading Iron Company, Reading, Pa., with offices at 230 Park avenue, New York. W. S. Shiffer was appointed assistant to the general manager of sales and R. I. Fretz was transferred from the Reading district to assume charge of the Pittsburgh district in place of Wyman Howells who will direct activities in the Reading district.

#### Washable Wall Paper

Through the efforts of E. I. duPont de Nemours & Company, Wilmington, Del., and the United Wall Paper Factories, Inc., Jersey City, N. J., a new washable wall paper has been developed, claimed to be "more durable, more amazing in stain resistance than the imported product, but is priced far below any similar product coming from abroad." The new product is sold by wall paper dealers and decorators under the trade name of En-Durel.

#### Fusion Welded Power-Boiler Drum

One of the latest developments in power boiler design and construction is a fusion welded power-boiler drum as fabricated by the Babcock & Wilcox Company, New York, for the Brown Paper Mill, Inc., Monroe, La. The drum is 16 feet long. 36 inches inside diameter, and designed for a working pressure of 207 pounds per square inch. All seams are welded by the new Babcock & Wilcox process, said to produce welds of great tensile strength, ductility, shock resistance and ability to withstand repeated applications of pressure. To test the soundness of the welds, all seams are explored with a powerful X-ray machine.

#### Acquires Lambert Hoisting Engine Business

The McKiernan-Terry Corporation, New York, has acquired the manufacturing business of the Lambert Hoisting Engine Company, Newark, N. J. The plant will hereafter be known as the Lambert Hoisting Engine Division of the McKiernan-Terry Corporation. Sales activities will be transferred to the General Sales Offices in New York of the McKiernan-Terry Corporation. Lambert hoisting engines and derricks, cableways, coal handling machinery and similar products will hereafter be manufactured in the works of the McKiernan-Terry Corporation at Harrison. N. J., where extensive additions have recently been made and new machinery installed.

#### Oklahoma Gas and Electric Officers

Directors of the Oklahoma Gas and Electric Company, Oklahoma City, Okla., have elected J. F. Owens, president, according to John J. O'Brien, president, Standard Gas and Electric Company, Chicago, parent organization. Mr. Owens has served as vice-president and general manager since 1918, while Mr. O'Brien, as president of the Byllesby Engineering and Management Corporation and Standard Gas, has served as president of Oklahoma Gas and other subsidiary and affiliated companies. W. R. Emerson was elected vice-president and treasurer of Oklahoma Gas and Electric Company; Frank J. Meyer, vice-president in charge of operation; George Ade Davis, vicepresident in charge of public relations, and B. M. Lester, secretary.

#### Acquires Pre Cote Corporation

The Municipal Engineering Company, Dallas, Tex., has acquired the Pre Cote Corporation of America, Indianapolis, Ind. M. Griffin O'Neil, vice-president of the Municipal Engineering Company, becomes president of the Pre Cote Corporation of America, which controls numerous patents for the manufacture of asphaltic paving materials, paving machinery and bitumen emulsions. General offices of the company will be retained at Indianapolis and a Southern branch office opened at Dallas.

#### Opens St. Louis Office

Russell T. Gray, Inc., Chicago, Ill., handling industrial advertising, has opened offices at 1830-34 Arcade Building, St. Louis, Mo., through Lyle T. Johnston and associates. The St. Louis personnel will be under the supervision of Mr. Johnston as vice-president of Russell T. Gray, Inc., offering St. Louis advertisers a complete advertising agency service, specializing in the industrial field.

#### Bids on 141 Miles Roads

Charleston, W. Va.-The State Road Commission opens bids May 26 for 12 road and 3 bridge projects, the former covering a total of 141 miles, including 7.8 miles of concrete, 22.80 miles of retread construction, 27.42 miles of grade and drainage construction, 7.91 miles of grade and drainage with shale surface, 62.74 miles of surface treatment and 12.4 miles of gravel surface. Bridge construction will include a 130-foot steel through truss superstructure on a concrete substructure across Lost River in Hardy County; two 90-foot steel pony trusses on a concrete substructure for the Man bridge in Logan County, and an 82-foot steel pony truss superstructure on a concrete substructure for the Simmons bridge in Mercer County.

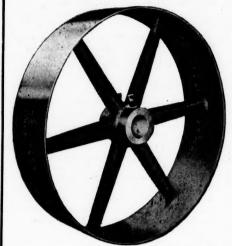
#### Uses for Natural Gas

The use of natural gas in the drying of crops, instead of dependence on the sun, was described by E. J. Hatzenbuehler, Lone Star Gas Company, Dallas, at the American Natural Gas convention in Memphis. In Texas, he added, crops often were saved by such use of this fuel and experiments there in the drying of cotton show prospects of producing a better staple because of better ginning. Milk also is being dried by natural gas, it was said.

"If I remember correctly, an English engineer made a study and ascertained that gas could be put to 25,000 separate and distinct uses," Mr. Hatzenbuehler continued.

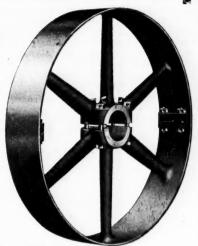
More than 1000 delegates participated in the deliberations and conclusions of the convention.

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Standard Single or Double Belt, Solid or Split Pulleys
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Solid Web Center Motor Pulleys—Dove-Tail Joint Split Pulleys
Conveyor Pulleys—Ball Bearing Loose Pulleys

Friction Wheels — Fly Wheels — Balance Wheels

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CONNORS is proud of the part it played in this impressive looking power plant. Due to their uniform quality and high tensile strength, Connors Rail Steel Bars were used for concrete reinforcement. Connors Pamous Service put them on the job on time. So is added another important structure to the list of "Connors Jobs!" Send us your plans and inquiries. Prices furnished without obligation.

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## FINANCIAL NEWS

#### **Bond Issues Proposed**

Ark., Stuttgart — Arkansas County votes June 9 on \$55,000 courthouse bonds.

Ark., Texarkana—Miller County probably sell \$150,000 jail bonds 60 days.

Ga., McDonough—City voted \$35,000, 5% paving bonds, \$1000 denom.

I.a., Baton Rouge—State Highway Comsn..
O. K. Allen, Chmn., opens bids June 15 for \$15,000,000, \$1000 denom. highway bonds; bidders to name rate of interest in multiples ¼ of one per cent.

La., Cameron—Gravity Drainage Dist. No. 3, Cameron Parish, John Sells, Pres., votes June 9 on \$12,000 bonds.

La., Gretna—City, A. Pierce, City Clk., opens bids June 2 for \$150,000 sewer disposal bonds, not exceeding 6%.

La., Houma—Terrebonne Parish Consolidated School Dist. No. 1, A. R. Viguerie, Pres., opens bids June 16 for \$160,000 not exceeding 6% \$1000 denom. bonds.

Md., Prince Frederick—Calvert County Commrs., William S. Ward, Pres., opens bids June 9 for \$345,000, 4½% bonds: \$45,000, 500 denom. school; \$300,000, \$1000 denom. public road.

Md., Rockville — Montgomery County, Berry E. Clark, Clk., opens bids June 9 for \$448,000, 4½%, \$1000 denom. bonds: \$200,000. courthouse site; \$75,000, school refunding; \$170,000, road construction funding.

Md., Rockville—Town Council directed William F. Prettyman, Town Atty., to prepare advertismenets for bids for \$50,000, 4½% waterworks and sewer bonds.

Miss., Greenwood — Leflore County voted \$500,000 road bonds.

Miss., Fayette—Jefferson County Supvrs., O. S. Gillis, Clk., opens bids June 2 for \$20,000 United Vocational School bonds; no bids will be considered for less than par and accrued interest.

Miss., Holly Springs—Red Banks Separate Road Dist. received no bids for \$35,000, 5½ and 6% road bonds. 4-16 Miss., Laurel—Myrick Consolidated Public School Dist. votes June 2 on \$25,000 bonds.

Miss., Yazoo City—City, Bd. of Aldermen, pproved \$148,000 bond issue to complete approved \$145,000 paving program.

Mo.. Higginsville—City votes June 2 on \$55,000 natural gas distribution system bonds.

N. C., Louisburg—City did not hold election on May 5 for \$25,000 college purchase bonds; may not vote at all.

Okla., Nance—Nance School Dist. considering issuing \$25,000 bonds; School Bd. to purchase bonds if approved by voters.

Okla., Oklahoma City—State Commrs. of Land Office, A. L. Beckett, Sec., advise there is no plan for selling bonds for state schools.

Schools.

S. C., Anderson—City, G. T. McGregor, Mayor, may vote on about \$550,000 bonds; \$400,000, retirement of present indebtedness; \$100,000 to \$150,000, sewerage extensions; maximum of \$50,000 for permanent street improvement.

S. C., Aiken—Aiken County, O. R. Cofer, Clk., County Commrs., opens bids May 25 for \$100,000, 4.75%, past indebtedness bonds.
S. C., Columbia—State Highway Comsn., Ben M. Sawyer, Ch. Highway Commr., reported, probably issue \$10,000,000 bonds in near future.

S. C., Spartanburg—City plans election on \$500,000 funding bonds.

Tex., Andrews—Andrews County, Jesse R. Orth, County Atty., postponed sale of \$100,000 road bonds until June 3.

Tex. Austin—State House of Representatives defeated proposed amendment to Constitution for election on \$212,000,000 road bonds.

Tex., Baird—City, H. Schwartz opens bids May 27 for \$20,000, 6% refunding bonds.

Tex., Boerne—Kendall County voted \$185,-000 road bonds. 4-23

Tex., Brastow—Town will issue \$41,000 water plant warrants.

water plant warrants.

Tex., Caldwell—Snook-Lyons Road Dist.,
Burleson County, plans issuing \$20,000 bonds.

Tex., Dimmitt—City votes June 1 on \$82.000 \$500 denom. bonds. \$12,000, street paving; \$70,000, outstanding warrants.

Tex., Palestine — Neches Consolidated School Dist., Anderson County, voted \$16,500 bonds.

Tex., San Antonio—Edgewood Common School Dist. No. 41, Bexar County, P. F. Stewart, Supt. of Schools, opens bids June 10 for \$15,000, 5% school coupon bonds.

Tex., San Benito—Cameron County Water Control & Improvement Dist. No. 16 votes June 6 on \$210,000 bonds to purchase Rice Tract Irrigation Co. system and to construct additional works.

Tex., Waco-McLennan County soon offer for sale \$612,000 road bonds.

Va., Falls Church—City, L. P. Daniel, Mayor, opens June 1 for \$125,000, not ex-ceeding 6%, \$1000 denom. water (coupon) 5-7

Va., Hampton—Hampton School Dist., Robert M. Newton, Div. Supt. of Schools, offer \$110,000, not exceeding 5% school building bonds subject to result of election June 1.

Va., Lynchburg—City Council agreed on suance of \$450,000 various improvement

bonds.

Va., Salem—Roanoke County, Thurston L.

Keister, County Judge, defeated \$350,000 school bonds.

#### **Bond Issues Sold**

Ark., Clarksville—Clarksville Consolidated Light & Water Improvement Dist. sold \$170,-000 bonds to I. H. Nakdimen, Pres., City National Bank, Fort Smith.

National Bank, Fort Smith.

Ark., Rogers — Rogers School Dist. sold \$30,000 bonds to J. E. Brath, Siloam Springs.

1-29

Fla., Umatilla—City sold \$11,500, 6% refunding bonds to D. H. Bickers, Umatilla, at

Ky., Newport—City, reported, recently sold \$100.000, 414% grade crossing elimination bonds to Almstedt Bros. Co., Louisville, at 100.55.

La., Amite—Tangipahoa Parish School Bd., Supt. of Education, sold \$25,000. 6% school building bonds to J. P. Clark & Co., Alex-

Md., Federalsburg—City, Thomas H. Chambers, Mayor, sold \$72,000, 4½%, refunding bonds to C. T. Williams & Co., Inc., Baltimore, at 101.394.

Md., Frostburg—City sold \$100,000 waterworks bonds to Union Trust Co. of Maryland, Baltimore, at \$103,700. 4-23

N. C., Dunn—City sold \$50,000 refunding bonds to C. W. McNear & Co., Chicago, Ill.

N. C., Goldsboro — Wayne County sold \$100,000 tax anticipation notes to W. O. Gay & Co., New York.

N. C., Lumberton—C. W. McNear & Co., Chicago, purchased \$212,000 refunding road and bridge bonds, as 4\%\%\, at 102.10; also \$140,000 road and bridge refunding bonds, as 4\%\%\, at 100.41.

N. C., Rockingham—Stranahan, Harris & Co., Inc., Toledo, Ohio, purchased \$100,000 refunding bonds, at 100.10.

N. C., Winston-Salem—City, reported, re-

N. C., Winston-Salem—City, reported, recently sold \$200,000 tax anticipation revenue notes to Page Trust Co., Aberdeen, at 3.20%.
Okla.. Harrah—City, Bd. of Education, W. B. Baldwin, Clk., sold \$40,000 school bonds to Calvert & Canfield, Oklahoma City, \$33,000, as 5½s, and \$6,000 as 4½s.

Tenn.. Collierville—City, W. W. Hutton, sold \$30,000 waterworks improvement bonds to Saunders & Thomas, Memphis, as 534s, at 100.50.

Tenn., Knoxville—Knox County sold \$500.000 Henley St. Bridge bonds to Joseph Hutton, Estes Co., Nashville and Little Wooten Co., Jackson, jointly; bidders have option on \$500,000 school improvement bonds.

Tenn., Pulaski—Giles County Court, W. F. English, Clk., sold \$130,000, \$1000 denom. funding bonds to First Securities Co., Mem-

Tex., Amarillo—City, reported, recently sold \$1,600,000, 6% gas distribution system bonds to G. M. Dunne, Wichita, Kans., and associates.

#### New Financial Corporations

Mo., Cowgill—First National Bank, capital \$30,000, chartered; John Farmer, Pres.

Mo., Kansas City-Harry S. Kissell, Spring-field, Ohio, Pres., National Association of

Real Estate Boards, considering establishing Federal real estate mortgage bank.
Okla., Grandfield—First State Bank, capital \$15,000, chartered; R. I. Helton, F. H. Lawerance.

Tenn., Memphis—K. S. K. S. Investment Co., 800 Bank of Commerce & Trust Co. Bldg., 10 S. Main St., chartered; Benja-min Goodman, Jr., Emmett W. Braden.

#### Nashville, Chattanooga & St. Louis Report

Total railway operating revenues of the Nashville, Chattanooga & St. Louis Railway for the year ended December 31, 1930, amounted to \$19,317,453, as compared with \$23,203,724 for 1929, according to the company's eightieth report. Operating expenses for 1930 were \$16,343,711, as against \$17,-397,378 for 1929, and gross income for 1930 was \$2,551,670, as compared with \$5,265,807 for 1929. Net income for 1930 was \$922,136, as compared with \$3,623,948 for 1929. Although it was necessary to curtail to some extent its improvement program, the company, nevertheless, made some important betterments, including an extension to its Nashville shops, clearing passenger station site in Atlanta, improving bridges and trestles, installing signals, placing ballast, etc.

#### \$855,000 Bonds Offered

Three Maryland counties and a town are offering a total of \$855,000 bonds. Wicomico County Commissioners, Salisbury, open bids June 2 for the purchase of an issue of \$90,000 scrip retiring bonds and an issue of \$110,000 school bonds, both issues to bear a 41/2 per cent interest rate. Frederick County Commissioners, Frederick, open bids May 23 for the purchase of four issues aggregating \$510,000 and including \$186,000 refunding bonds, \$100,000 serial bonds, both to bear an interest rate of 4 per cent; an issue of \$100,000 to bear an interest rate of 41/2 per cent, and an issue of \$124,000 bonds to bear an interest rate of 41/4 per cent. On May 22 the Town Commissioners, Centreville, Alfred Green, president, open bids for the purchase of \$70,-000 electric plant improvement bonds to bear a 5 per cent interest rate.

#### Smaller Bituminous Coal Stocks

Commercial stocks of bituminous coal used largely for industrial purposes amounted to 29,500,000 tons on April 1, according to the quarterly survey of the Bureau of Mines. In comparison with the amount on hand at the beginning of the previous quarter, this is a decrease of 7,700,000 tons and is the smallest tonnage in storage for any period on record since 1922. In addition to stocks in the hands of consumers there were 4.747.000 tons of bituminous on the docks of Lake Superior and Lake Michigan on April 1, as compared with 8,940,000 tons at the beginning of the year.

WE extend the facilities of our organization to those desiring information or reports on companies with which we are identified.

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CITY AND COUNTY NOTES

COMMERCIAL PAPER

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#### \$5,750,000 HEATING PLANT

#### Engineers Engaged for Big Washington Project

Washington, D. C .- The United Engineers & Constructors, Inc., Dwight P. Robinson, president, Philadelphia, Pa., have been engaged by the office of the Acting Supervising Architect, Treasury Department, to prepare engineering plans for the new central heating plant and steam and electrical distribution systems to be built here at a cost of approximately \$5,750,000. The plant will supply heat to 26 government buildings, including the Smithsonian Institute, Bureau of Engraving and Printing, Department of Agriculture, Veterans Bureau, old National Museum, new National Museum, Washington Monument, Commerce, Internal Revenue, Treasury, Labor Department and Interstate Commerce Commission, with connecting buildings, Post Office Department, Internal Revenue Building, Department of Justice, Archives. Coast Guard and independent establishments, buildings to replace present municipal buildings, Treasury Annex No. 1, Freer Art Museum, Army Medical Museum, Agricultural Extensible Building, Agricultural Economics Building, Auditors, Liberty Loan, Federal Warehouse, proposed Army and Navy Building and Municipal Center. It will be one of the largest of its kind in the United States and will be built at this time, it is said, because of additional heating requirements of new government. buildings recently completed, now under construction or contemplated in the area bounded by Pennsylvania avenue, Maryland avenue and Fifteenth street.

Buildings to be supplied by the new plant are estimated to require 1,500,-000,000 pounds of steam per average year, of which this plant will provide for 75 per cent of that capacity and will be designed for future extensions. Steam will be distributed to the buildings through an underground system of pipes varying in diameter from 3 inches to 18 inches, with an aggregate length of approximately 5 miles. An electrical substation will be built in connection with the heating plant, to distribute electric power, which will be purchased from the Potomac Edison Company. Buildings to be supplied with steam and electric light and power in the initial installation will consume approximately 34,000,000 kilowatt-hours of electric current in an average year, it is estimated, with a maximum demand on the electrical distribution system of 18,000 kilowatts. Future extensions will increase these demands by about 35 per cent. The design of the plant will embody modern features in the combustion of fuels and production of steam, with an electrical design to provide maximum service at a minimum

of cost. Special attention will be given architectural features of the plant which will be approved by the Fine Arts Commission of Washington.

## Cotton Week to Be Widely Recognized

Several million dollars will be spent by wholesale and retail distributors in advertising cotton goods during the National Cotton Week, June 1 to 6, according to George A. Sloan, president of the Cotton Textile Institute. The merchandising possibilities are pronounced by Mr. Sloan as of the utmost importance.

Endorsement of the project has been expressed by the directors of the Cotton Manufacturers Association of Georgia, the National Association of Cotton Manufacturers has approved it and many corporations and individual business men have joined in the movement. Plans are reported for elaborate cotton textile exhibits, window displays, fashion shows and other features, and the style, beauty and utility of cotton products are to be conspicuously set forth.

Throughout the South many "wear cotton" celebrations are being held.

Following his suggestion about the significance of the merchandising possibilities of cotton, Mr. Sloan emphasized that the time is particularly appropriate for the cotton mills in cooperation with their distributors to make this concerted and aggressive move to stimulate buying. Continuing he said: "Everyone identified with cotton manufacturing knows what has been done during the past few years to correct some of the industry's fundamental difficulties. Moreover, the discontinuance of night employment of women and minors, the better balancing of production and demand, and the success accomplished by the industry in improved styling and designing have met with widespread public approval.

"There are clear indications that the industry has put itself in a position to be among the first to feel the effects of general business recovery. It has been suggested that, instead of waiting until there are external signs of recovery, this industry might contribute impressively by way of generating a widespread upturn in business. This was one of the principal reasons that led to the proposal of National Cotton Week as a timely and perfectly sound effort to stimulate retail trade and business generally."

Aggressive merchandising is described by Mr. Sloan as the keynote of the movement.

# Retail Coal Merchants Association

The fourteenth annual convention of the Retail Coal Merchants Association will be held at the Lord Baltimore Hotel, Baltimore, from June 4 to 6, with an expected attendance of 2000 delegates. Prominent figures in the coal industry will discuss practically all important aspects of the industry in America, reviewing the latest developments, successful practices, improved technique and procedure, etc. A banquet will be held on the night of June 5, at which Governor Ritchie is expected to be the speaker. J. F. Palmer is general chairman of the convention committee; H. C. McComas, vicechairman, and Horace Isaac, treasurer, A reception committee will be headed by Hugh C. Hill, while other chairmen of committees include: H. Harry West, publicity; William J. Womer, transportation; B. F. Lucas, exhibit; Gertrude B. Galligher, ladies' reception committee: A. F. Gross, auto and local transportation, and Roderick Stephens, banquet committee.

#### Peanut Growers Organize

Definite steps by farmers to establish, with the assistance of the Federal Farm Board, a national marketing organization for the principal peanut growing regions of the Southeastern States are reported by the Farm Board. Regional meetings have been held by peanut growers of Alabama, Florida, Georgia and North Carolina, and a meeting will be held in Virginia, June 2. In the last five years, these states have produced more than 80 per cent of the peanuts grown in the United States.

Plans for the Alabama-Florida regional were adopted at a meeting at Dothan, Ala., in April, and the growers made application for a charter for the Alabama-Florida Peanut Growers Cooperative Association. In meetings at Albany, Ga., and Windsor, N. C., committees were instructed to organize at once the growers of these states into regionals. It is planned to make the county the local unit and use the federated plan of organization in North Carolina and possibly in Georgia, while the central plan will be used in Alabama and Florida.

#### \$700,000 Veterans' Hospital

Huntington, W. Va.—Sealed bids will be opened June 23 in the office of the U. S. Veterans Bureau, Washington, for construction of buildings and utilities, including roads, walks, grading and drainage for a \$700,000 U. S. Veterans Hospital here.

# The SOUTH

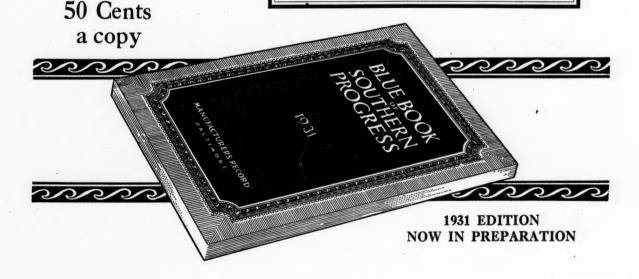
an industrial area of wondrous wealth

THE annual Blue Book of Southern Progress has a wide circulation among the country's leading executives, professional men, railroads, public utility operating and holding companies, banks, bond houses, public officials in states, counties and municipalities, and among commercial and business organizations generally.

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MANUFACTURERS RECORD
Baltimore Maryland





# PROPOSAL

**BOND ISSUES** 

**BUILDINGS** 

**PAVING** 

**GOOD ROADS** 



Bids close June 2, 1931.

Bids close June 2, 1931.

TREASURY DEPARTMENT, office of the Supervising Architect, Washington, D. C., May 5, 1931.—SEALED BIDS, in duplicate subject to the conditions contained herein, will be publicly opened in this office at 3, m., June 2, 1931, for furnishing all labor and materials and performing all work for the construction, etc., of the U. S. post office at Lumberton, Miss. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding three sets, may be obtained at this office in the discretion of the supervising architect by any satisfactory general contractor, and provided a deposit of \$15.00 is made for each set to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. Cash deposits will not be accepted. JAS. A. WETMORE, Acting Supervising Architect.

Bids close June 3, 1931.

TREASURY DEPARTMENT, office of the Supervising Architect, Washington, D. C., May 6, 1931.—SEALED BIDS, in duplicate subject to the conditions contained herein, will be publicly opened in this office at 3, p. m., June 3, 1931, for furnishing all labor and materials and performing all work for the construction (except elevator) of the U. S. post office, court house, etc., at Rock Hill, S. C. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding three sets, may be obtained at this office in the discretion of the supervising architect by any satisfactory general contractor, and provided a deposit of \$25.00 is made for each set to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. Cash deposits will not be accepted. JAS. A. WETMORE, Acting Supervising Architect.

Bids close June 4, 1931.

TREASURY DEPARTMENT, office of the Supervising Architect. Washington, D. C., May 7, 1931.—SEALED BIDS in duplicate, subject to the conditions contained herein, will be publicly opened in this office at 3 p. m.. June 4, 1931, for furnishing all labor and materials and performing all work for the extension and remodeling of the U. S. court house and post office at Opelousas, La. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding three sets, may be obtained at this office in the discretion of the supervising architect by any satisfactory general contractor, and provided a deposit of \$15.00 is made for each set to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. Cash deposits will not be accepted. JAS. A. WETMORE, Acting Supervising Architect.

Bids close May 27, 1931.

TREASURY DEPARTMENT, Office of the Supervising Architect. Washington, D. C., April 29, 1931.—SEALED BIDS, in duplicate subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., May 27, 1931, for furnishing all labor and materials and performing all work for the construction of the U. S. post office, etc., Bath, N. Y. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding 3 sets, may be obtained at this office in the discretion of the supervising architect by any satisfactory general contractor, and provided a deposit of \$15.00 is made for each set to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. Cash deposits will not be accepted. JAS. A. WETMORE, Acting Supervising Architect.

GENERAL INFORMATION About Proposal Advertising in Manufacturers Record

PUBLICATION DAY: Thursday. FORMS CLOSE: 10 A. M. Tuesday. When too late to send copy by regular mail to reach us by 10 A. M. Tuesday, forward by night letter or air mail when possible

THE
DAILY CONSTRUCTION BULLETIN
OF THE
MANUFACTURERS RECORD

Published every business day, gives information about the industrial, commercial and financial activities of the South and Southwest.

west.

The Daily Construction Bulletin can be used to advantage when copy cannot reach us in time for publication in the Manufacturers Record before bids are to be opened or when daily insertions are necessary to meet legal requirements.

The rate is the same for both publications—35 cents a line each insertion.

Bids close June 2, 1931.

U. S. ENGINEER OFFICE, First New Orleans District, Poland and Dauphine Streets, New Orleans, La.—SEALED BIDS, in duplicate will be received until 3 p. m., June 2, 1931, and then publicly opened, for furnishing all labor and materials and performing all work for dredging the Louisiana and Texas Intracoastal Waterway, Atchafalaya-Vermillion section from the Atchafalaya River to Bayou Gregorie, La., comprising 4,988,800 cubic yards, place measurement. Further information on application.

Bids close June 5, 1931.

TREASURY DEPARTMENT, Office of the Supervising Architect. Washington, D. C., May 13, 1931.—SEALED BIDS in duplicate subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., June 5, 1931, for furnishing all labor and materials and performing all work for remodeling and enlarging the U. S. marine hospital at Savannah, Ga. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding one set, may be obtained by any satisfactory general contractor at this office in the discretion of the supervising architect. JAS. A. WETMORE, Acting Supervising Architect.

Bids close June 17, 1931.

Bids close June 17, 1931.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., May 18, 1931.—SEALED BIDS, in duplicate subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., June 17, 1931, for furnishing all labor and materials and performing all work for the extension and remodeling (except elevators) of the U. S. post office and court house at Shreveport, La. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding three sets, may be obtained at this office in the discretion of the supervising architect by any satisfactory general contractor, and provided a deposit of \$25.00 is made for each set to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States, Cash deposits will not be accepted. JAS. A. WETMORE, Acting Supervising Architect.

Bids close June 2, 1931.

War Department, Office Constructing Quartermaster, Fort Bragg, N. C. Sealed proposals in triplicate will be received until 10:00 A. M., June 2, 1931, and then publicly opened, for the construction and completion of Hospital, and the utilities thereto, at Fort Bragg, North Carolina. A certified check or bid bond in the amount of \$40,000.00 will be required with each bid. \$30.00 deposit certified check, payable to Treasurer of United States, required for drawings and specifications. Further information on request.

Bids close May 28, 1931.

Bids close May 28, 1931.

TREASURY DEPPARTMENT, Office of the Supervising Architect, Washington, D. C., May 13, 1931.—SEALED BIDS in duplicate subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., May 28, 1931, for furnishing all labor and materials and performing all work for remodeling a building (old municipal building) at Lynchburg, Va., for U. S. postoffice purposes. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding one set, may be obtained by any satisfactory general contractor at this office in the discretion of the supervising architect. JAS. A. WETMORE, Acting Supervising Architect.

Bids close June 3, 1931.

Bids close June 3, 1931.

U. S. Department of Agriculture, Bureau of Public Roads, Washington, D. C., May 6, 1931.—SEALED BIDS, single copy, subject to the conditions contained herein, will be received until eleven o'clock a. m., June 3, 1931, and then publicly opened, for furnishing all labor and materials, and performing all work for Unit II, of the Colonial National Monument Parkway. Unit II begins at the south side of the first draw south of the Officers' Quarters of the Navy Mine Depot, and extends north along the shore of the York River to a point north of Indian Field Creek, a distance of approximately 4400 feet, and also includes the fill across Felgate's Creek, a distance of approximately 1200 feet. Unit II lies entirely within the limits of the Navy Mine Depot, in York County, Virginia. Bids will be opened at the office of the Bureau of Public Roads, Willard Building, Washington, D. C., for at the office of the Bureau of Public Roads, Willard Building, Washington, D. C., or at the office of the Bureau of Public Roads, Willard Building, Washington, D. C., or at the office of the Bureau of Public Roads, Willard Building, Washington, D. C., or at the office of the Bureau of Public Roads, Willard Building, Washington, D. C., or at the office of the Bureau of Public Roads, Willard Building, Washington, D. C., or at the office of the Bureau of Public Roads, Willard Building, Washington, D. C., or at the office of the Bureau of Public Roads in the amount of Public Roads in the such was an accepted. Guarantee will be required with each bid as follows: 5 per cent of the amount of the bid. Performance bond will be required as follows: 5 per cent of the amount of the bid. Performance bond will be required as follows: In the amount of 100 per cent of the total contract price. Liquidated damages for delay will be \$20.00 per day for each calendar day of delay until the work is completed and accepted. Partial payments will be made a part of the contract. Bids must be submitted upon the Standard Government Form of Co

Bids close May 25, 1931.

U. S. Engineer Office, Jacksonville, Fla.—Sealed bids, in duplicate, will be received here until 12 noon, May 25, 1931, and then opened, for furnishing all labor, equipment and accessories and performing all work for core drilling in Lake Okeechobee, Fla. Further information on application.

Bids close June 23, 1931.

Bids close June 23, 1931.

SEALED BIDS, in triplicate, subject to the conditions contained herein, will be received by the U. S. Veterans' Bureau, Room '64, Arlington Building, Washington, D. C., until 2:30 P. M., June 23, 1931, and then publicly opened for furnishing all labor and materials and performing all work required for constructing and finishing complete at U. S. VETERANS' HOS-PITAL HUNTINGTON, WEST VIRGINIA, BUILDINGS AND UTILITIES, including roads, walks, grading and drainage. This work will include excavating, reinforced concrete construction, hollow tile, brick work, cut stone, cast stone, architectural terra cotta, marble work, floor and wall tile, rubber tile, compressed asphalt tile and linoleum floors, terrazzo, iron work, flag poie, steel sash, steel stairs and slate or soap stone and metal treads, steel shelving, cabinets and partitions, slate, metal and built-up roofing, lightning conductors, roof ventilators, metal lathing, plastering, sound deadening, carpentry, platform scales, metal weatherstrips, insect screens, window shades, painting, glazing, hardware, plumbing, refrigerating and ice making plant, boiler plant, radial brick chimney, heating and ventilating, electrical work, electric elevators, nurses' call system, fire alarm system, and outside sewer, water, gas, steam and electric distribution systems. SEPARATE BIDS will be received for (a) General Construction including Radial Brick Chimney; (b) Plumbing, Heating, Electrical Work and outside distribution systems; (c) Electic Elevators; (d) Steel Water Tank and Tower; (e) Refrigerating and lee Making Plant; all as set forth on bid form. Bids will be considered only from individuals, firms or corporations possessing satisfactory financial and technical ability, equipment and organization to insure speedy completion of the contract and in making awards, the records of bidders for expedition and satisfactory performance on contracts of similar character and magnitude will be carefully considered. At the discretion of the Director, draw

Bids close June 2, 1931.

#### Road Construction and Materials

Materials

Bastrop, La.

The Police Jury of Morehouse Parish will receive bids up to 11 A. M., Tuesday, June 2nd, at Bastrop, La., and at that time and place publicly opened and read proposals for the unloading, hauling and spreading and for gravel for the surfacing of the following projects:

Project No. 5 Road and Bridge District No. 4, length 4 miles.

Project No. 100 Road District No. 1, length 1 mile.

Also for the construction of roadbed, including surfacing and for the gravel for the following projects:

Project No. 200 Road District No. 1, length 3½ miles.

Wardville Lane, length 1 mile.

Information governing manner of submitting proposals, terms of 'payment and proposal blanks for submitting bids on the above work may be secured upon application at the Parish Engineer's office at Bastrop, Louisiana. A certified check in the amount of 5% of the amount bid must accompany each proposal and a surety bond in the amount of 50% of the total amount bid will be required when contract is awarded.

J. LESTER WHITTE,

Parish Engineer.

J. W. BRODNAX, President, Police Jury.

Bids close June 2, 1931.

#### Louisiana Highway Work

Baton Rouge, La.

Sealed Proposals for the construction of the following Project will be received by the Louisiana Highway Commission, Room No. 614 Louisiana National Bank Building, Baton Rouge, Louisiana, until 9:45 A. M. on Tuesday, June 2, 1931. Proposals will not be received after this hour. At 10 o'clock A. M. of the same day and date they will be publicly opened and read in the Chamber of the House of Representatives in the State Capitol Building.

BOND PROJECT NO. 1102, LYLES-FENTON HIGHWAY. Located in ALLEN and JEFFERSON DAVIS PARISH, Route 24. Length 10.7 miles, width 18 ft. Type: Portland Cement Concrete Pavement and other work in connection therewith. Charges for plans \$2.50.

BOND PROJECT NO. 1406, ROSEWOOD-

BOND PROJECT NO. 1406, ROSEWOOD-MOREAUVILLE HIGHWAY. Located in AVOYELLES PARISH, Route 30. Length 6.5 miles, width 18 ft. Type: Portland Cement Concrete Pavement and other work in connection therewith. Charges for plans \$2.00.

in connection therewith. Charges for plans \$2.00.

BOND PROJECT NO. 1505, GILLIS-INTERSECTION ROUTE 7 HIGHWAY. Located in CALCASIEU and BEAUREGARD
PARISHES, Route 42. Length 9.2 miles,
width 18 ft. Type: Portland Cement Concrete Pavement and other work in connection therewith. Charges for plans \$2.00.

BOND PROJECT NO. 1705, BENTONPLAIN DEALING HIGHWAY. Located in
BOSSIER PARISH, Routes Nos. 10 and 70.
Length 15.7 miles, width 18 ft. Type:
Portland Cement Concrete Pavement and
other work in connection therewith. Charges
for plans \$3.00.

BOND PROJECT NO. 1908. SULPHURCARLYSS HIGHWAY. Located in CALCASIEU PARISH, Route 104. Length 4.9
miles, width 18 ft. Type: Portland
Cement Concrete Pavement and other work
in connection therewith. Charges for plans
\$1.50.

BOND PROJECT NO. 2701, TRANSYL-

\$1.50.

BOND PROJECT NO. 2701, TRANSYL-VANIA-ENOKA HIGHWAY. Located in EAST CARROLL AND MADISON PARISHES, Route 3. Length 10.6 miles, width 18 ft. Type: Portland Cement Concrete Pavement and other work in connection therewith. Charges for plans \$2.50.

BOND PROJECT NO. 3505, ELTON-KINDER HIGHWAY. Located in JEFFERSON DAVIS and ALLEN PARISHES, Route 7. Length 10.5 miles, width 18 ft. Type: Portland Cement Concrete Pavement and other work in connection therewith. Charges for plans \$2.50.

BOND PROJECT NO. 3702, LAFAY-

BOND PROJECT NO. 3702, LAFAY-ETTE NORTH AND EAST HIGHWAY. Located in LAFAYETTE and ST. MARTIN PARISHES. Routes 43 and 5. Length 9.1 miles, width 18 ft. Type: Portland Ce-ment Concrete Pavement and other work in connection therewith. Charges for plans \$2.00.

ment Concrete Pavement and other work in connection therewith. Charges for plans \$2.00.

BOND PROJECT NO. 4410, CHOPIN-ZIMMERMAN HIGHWAY. Located in NATCHITOCHES and RAPIDES PARISHES, Route 20. Length 7.3 miles, width 18 ft. Type: Portland Cement Concrete Pavement and other work in connection therewith. Charges for plans \$2.00.

BOND PROJECT NO. 4610, MONROE-ARCHIBALD HIGHWAY. Located in OUACHITA and RICHLAND PARISHES. Route 15. Length 11.0 miles, width 18 ft. Type: Portland Cement Concrete Pavement and other work in connection therewith. Charges for plans \$2.50.

BOND PROJECT NO. 4806, LETTS-WORTH-SIMMESPORT HIGHWAY. Located in POINTE COUPEE PARISH, Route 30. Length 6.8 miles, width 18 ft. Type: Portland Cement Concrete Pavement and other work in connection therewith. Charges for plans \$2.00.

BOND PROJECT NO. 4914, ZIMMER-MAN-RAPIDES HIGHWAY. Located in RAPIDES HIGHWAY. Located in RAPIDES HIGHWAY. Located in RAPIDES HIGHWAY. Located in RAPIDES HIGHWAY. Portland Cement Concrete Pavement and other work in connection therewith. Charges for plans \$2.00.

BOND PROJECT NO. 5206, FLORIEN-HORNBECK HIGHWAY. Located in SA-HORNBECK HIGHWAY.

\$2.00.

BOND PROJECT NO. 5206, FLORIEN-HORNBECK HIGHWAY, Located in SABINE and VERNON PARISHES. Route 42. Length 10.3 miles, width 18 ft. Type: Portland Cement Concrete Pavement and other work in connection therewith. Charges for plans \$2.50.

BOND PROJECT NO. 5900, LAFAY-ETTE-ST. MARTIN PARISH LINE-NINA HIGHWAY. Located in ST. MARTIN PARISH, Routes 43 and 25. Length 9.2

miles, width 18 ft. Type: Portland Cement Concrete Pavement and other work in connection therewith. Charges for plans \$2.00.

ment Concrete Pavement and other work in connection therewith. Charges for plans \$2.00.

BOND PROJECT NO. 5002, ST. MARTINVILLE-BREAUX BRIDGE HIGHWAY. Located in ST. MARTIN PARISH, Route 25. Length 11.2 miles, width 18 ft. Type: Portland Cement Concrete Pavement and other work in connection therewith. Charges for plans \$2.50.

BOND PROJECT NO. 6301, ST. JOSEPH NORTH AND SOUTH HIGHWAY. Located in TENSAS PARISH, Route 3. Length 8.0 miles, width 18 ft. Type: Portland Cement Concrete Pavement and other work in connection therewith. Charges for plans \$2.00.

BOND PROJECT NO. 6603, KAPLANGUEYDAN HIGHWAY. Located in Vermilion Parish, Route 25. Length 13.0 miles, width 18 ft. Type: Portland Cement Concrete Pavement and other work in connection therewith. Charges for plans \$2.50.

BOND PROJECT NO. 6704, HORN-BECK-HAWTHORN HIGHWAY. Located in VERNON PARISH, Route 42. Length 10.9 miles, width 18 ft. Type: Portland Cement Concrete Pavement and other work in connection therewith. Charges for plans \$2.50.

Full information and proposal forms are available at the office of the Highway Com-

\$2.50.

Full information and proposal forms are available at the office of the Highway Commission at Baton Rouge. Plans and specifications may be inspected there or will be furnished upon payment of the amount specified above (not to be refunded).

HARRY B. HENDERLITE,

State Highway Engineer. O. K. ALLEN, Chairman, Louisiana Highway Commission.

Bids close May 26, 1931.

#### Maryland Highway Work

DEPARTMENT OF PUBLIC WORKS STATE OF MARYLAND STATE ROADS COMMISSION

NOTICE TO CONTRACTORS

Baltimore, Md.

Baltimore, Md.

SEALED PROPOSALS for building five sections of State Highway as follows:
Charles County, Contract No. Ch-103-84—
One section of State Highway from the LaPlata-Dentsville Road toward Bryantown, a distance of 2.1 miles (gravel)
Carroll County, Contract No. Cl-97-511—
Fed. Aid Proj. No. 237—One section of State Highway along the Liberty Road from Eldersburg to Taylorsville, a distance of 8.26 miles (concrete shoulders)
Harford County, Contract No. H-120-44—
One section of State Highway from Shipley's Corner on the Philadelphia Road to Magnolia, a distance of 2.94 miles (macadam)
Washington County, Contract No. W-91-62—One section of State Highway from Dry Run to Fairview, a distance of 2.03 miles, and from Dry Run toward the National Pike, a distance of 1.17 miles, total 3.20 miles (macadam)
Somerset County, Contract No. S-50-14—One section of State Highway from Maryland Avenue to McCready Hospital, a distance of 0.55 miles (macadam resurfacing)
will be received by the State Roads Commission at its offices, Federal Reserve Bank Building, Calvert and Lexington Streets. Baltimore, Maryland, until 12 M. on the 26th day of May, 1931, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and

place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans, will be furnished by the Commission upon application and cash payment of \$1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred (\$500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond and comply with the Acts of the General Assembly of Maryland respecting contracts.

General Assembly of Maryland respecting contracts.

The Commission reserves the right to reject any and all bids.

BY ORDER of the State Roads Commission this 12th day of May, 1931.

G. CLINTON UHL, Chairman.

L. H. STEUART, Secretary.

Reinforcing Bars

Jacksonville, Fla.

Bids are requested by the State of Florida for fifty (50) tons of round 5%" hard, deformed, reinforcing bars, delivered f. o. b. cars, Raiford, Florida, A.C.L.R.R.

C. S. HAMMATT,

State Engineer.

Bids close June 8, 1931

Street Oiling

Street Oiling

Sebastian, Fla.

The City Council of the City of Sebastian, Florida, will receive sealed bids up to the hour of 8 p. m., on June 8th, 1931, at the City Hall, City of Sebastian, Florida, for oiling of approximately 38,000 square yards of paved streets in the said city. Check for \$500 should accompany each bid to evidence bidder's good faith. The right is reserved to reject any and all bids. Full particulars relative to the contemplated work may be had by inquiry at the office of the City Clerk, of the City of Sebastian, Florida.

By order of the City Council of the City of Sebastian, Florida.

LENORA K. PARK, City Clerk.

Bids close July 7, 1931.

#### Electric Light Plant

NOTICE is given that City Council, Ocola, Florida, on July 7th, 1931, at 8 P. M., will consider sealed proposals for furnishing and installing machinery in its Electric Light Plant. The costs thereof to be paid out of savings and/or earnings of plant.

Right is reserved to reject any and all proposals. If interested write

J. R. MARTIN, City Manager,

Bids close May 26, 1931.

#### Water Supply Works

Lebanon, Tenn.

Sealed proposals for furnishing materials and constructing additional water supply works will be received by the City of Lebanon, Tennessee, at the City Hall until 2:00 p. m., May 26, 1931.

The work will consist of constructing a raw water pumping station, a filtration plant of 1,500,000 gallons daily capacity

and laying approximately six miles of cast iron pipe.

Each proposal must be accompanied by a certified check payable to the City of Lebanon, in an amount equal to five (5%) per cent of the bid, as a guarantee that the contract will be entered into, if awarded. A bond equal to one hundred (100%) per cent of the successful bidder as surety that he or it will pay for all materials and labor used in said contract and for the faithful performance of same.

Plans and specifications are on file at the office of the Commissioner of Public Works at Lebanon, Tennessee, and with Wiedeman and Singleton, Engineers, Atlanta, Ga.

Bidders may obtain copies of the plans and specifications from the Engineers by enclosing certified check for twenty-five (\$25.00) dollars, payable to the Engineers, fifteen (\$15.00) dollars of which will be returned upon the return of the plans and specifications, or upon the submission of a bona fide bid. The City reserves the right to reject any or all bids.

FRANK BUCHANAN,

all bids. FRANK BUCHANAN, Mayor.



# SSIFIED OPPORTUNITIES



#### MINERAL AND TIMBER LANDS, WATER POWER, MISCELLANEOUS PROPERTIES

SOUTHERN WEST VIRGINIA
Smokeless coal, several thousands tons
monthly; no middleman; mine direct to
consumer, or dealer; good rating and
prompt pay necessary. Write P. O. Box
No. 368, Beckley, West Va.

MANGANESE DEPOSIT
MANGANESE—NEAR RAILROAD AND
RIVER IN ROCKINGHAM CO., VA.; 300
ACRES HIGH-GRADE ORE. HAS YIELDED 6000 TONS THE ACRE. ADJACENT
LAND ALSO YIELDS ORE. FOR DESCRIPTION AND TERMS WRITE A. L.
HARNSBERGER, MT. AIRY, MD.

TIMBER AND TIMBER LANDS
COLONIZATION, GRAZING & TIMBER
TRACTS
With lower taxes assured, prices on acreage is sure to advance. We have tracts from 4000 to 400,000 acres some well stocked all kinds of game and suitable game preserve, others with merchantable growth worth more than price asked, making Ideal Investments for surplus funds. Now is buying time for Florida. Descriptions gladly furnished.
Gilbert Sales & Securities Co., Inc.,

Gilbert Sales & Securities Co., Inc., Arcade Bldg., Kissimmee, Fla.

#### FARM, FRUIT AND TRUCK LANDS

LOWER RIO GRANDE Valley orchards and acreage at actual value. Owner's price direct to you. Send for list. ROBERTS REALTY CO., Realtors, McAllen, Tex.

#### SOUTHERN ESTATES

ESTATE FOR SALE—11 acres on St. Johns River opposite Jacksonville, also 12-room residence in good location, only few blocks from business center of Jacksonville, A. G. Chappell, P. O. Box 392, Jacksonville, Fla.

#### **BUSINESS OPPORTUNITIES**

BUSINESS OPPORTUNITY: I have available suitable space, improved modern type machinery and equipment necessary for wood-working plant—furniture or other wood products. Also considerable standing timber. Would like to make connection with right party or parties interested in proposition of this kind. Would require some capital and absolute knowledge of business you would be interested in. Location good. Reputation already established for making A-1 products. Address No. 9103, care of Manufacturers Record, Baltimore, Md.

#### Rates, Terms and Conditions

RATES: 30 cents a line each insertion. Minimum space accepted, four lines. In estimating the cost allow six or seven words of ordinary length to line. When the advertisement contains a number of long words proper allowance should be made.

Rates for Special Contract: 100 lines 28c a line 300 lines 26c a line 500 lines or more 25c a line

TERMS: For transient advertising cash with order; check, postoffice or express money order or stamps accepted.

On special contract advertising bills are rendered monthly, covering space used each month, payable within ten days.

CONDITIONS. No patent medicine, oil or mining stock advertisements or questionable or undesirable advertisements will be accepted. The assistance of our readers in excluding undesirable advertisements is requested. No display type used.

#### **BUSINESS OPPORTUNITIES**

LONG TERM LOANS, large amounts, made on industrial, mercantile, sawmill properties. THOS. W. GILMER, Attorney, Bay Minette, Alabama.

MANUFACTURERS—Write for our FREE Classification Sheets of inventions for sale, covering 135 main subjects, and in one or more of which you will doubtless be interested. ADAM FISHER MFG. CO., 578 Enright, St. Louis, Mo.

#### PARKERSBURG.

Successful manufacturers are invited to join this city's colony of prosperous, medium sized, diversified industrial plants.

BOARD OF COMMERCE, Parkersburg, West Virginia.

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WANTED MONEY to discount gilt-edge securities. Good interest. Good discount. Absolutely safe investment. Address H. T. HICKS, Attorney, Wrightsville, Ga.

#### INDUSTRIAL SURVEYS

ENGINEERING REPORTS on resources of cities and towns. Recommendations for industrial development and zoning made by specialists in locating industries.

TECHNICAL SERVICE CO.,
Woolworth Building New York City

#### INDUSTRIAL PLANTS

FOR SALE—Sheet Metal Plant, equipped to manufacture Steel Desks, Radiator Cabinettes, Lockers, Steel Shelving, etc. Located in Birmingham District. Address MANAGER, P. O. Box 42, Birmingham, Ala.

#### FOR SALE

Approximately 8 acres of land, 500 feet railroad siding, Pattern and Machine shops, air compressor with electric motors, electric motor generator, cupola, blower and other equipment. Situated on the Birmingham-Washington division of Southern Railway, Anniston, Ala. Address P. O. Box 137, Anniston, Ala.

#### **FACTORY BUILDINGS**

750 H.P. WATER POWER and about the same Steam Power. Factory must be sold immediately at sacrifice, containing 253,000 square feet of floor space; 59 miles from N. Y. City; water and rail transportation. Full particulars upon request.

LOEB & SCHOENFELD CO., 1123 Broadway, N. Y. C.

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WEST VIRGINIA FACTORY SITE
Adjoining town. Along with good water
power electric plant. Also fuel oil auxiliary
for emergency use. On railroad siding. Will
lease or sell. Prices reasonable. Development desired. Will offer inducements. Address No. 9097, care Manufacturers Record.

MANUFACTURING AND STORAGE SITES
Large body of land located in the City
of Charlotte, North Carolina. One mile from
center of city. Population ninety thousand.
Land located in heart of Textile District.
Available skilled labor. Accessible to Railroads, Street Railways, Hydro-Electric
Power. Fronting Hard-surface Street; Water
and Sewerage. Approximately two hundred acres. Ideal location for manufacturing and storing enterprises. Will sell
upward to meet requirements.

PEGRAM-WADSWORTH LAND CO.

(Owners).

Office, 219 N. College St.,
Charlotte, N. Car.

#### **FACTORY SITES**

TWO AND ONE-QUARTER MILES rail-road frontage industrial sites for sale at Baton Rouge. Southern Land and Invest-ment Company, Baton Rouge, La.

INDUSTRIES ARE MOVING SOUTH

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5000 acre tract, many buildings already
built suitable for units of large or small
industries, main line T. T. near Seaport.
Investigate our free taxes, and free site
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#### REPRESENTATIVES WANTED

WE MAKE Water Conditioning Chemicals and desire to communicate with men now active, calling on the power trade or handling boiler room specialties. Work is highly remunerative. Address No. 9080, care of Manufacturers Record.

PUMP MANUFACTURER has several open territories in South. He would like to contact with sales representatives, covering building engineers, municipal engineers, and industrials. Line includes high and low pressure Centrifugal Pumps of capacities up to 3000 GPM, non-clogging pumps up to 7500 GPM, and axial flow pumps for low heads up to 20,000 GPM. A profitable line of equipment for a good Engineers Sales Organization. Address No. 9091, care Manufacturers Record, Reltimore, Md. PUMP MANUFACTURER has

#### SITUATIONS WANTED

BUSINESS WOMAN, with secretarial experience, wants position as Manager of Apartment House. References. Address No. 9108, care Manufacturers Record, Baltimore.

#### MEN WANTED

WANTED—Man to take entire charge of operation of a machine shop. Must have sufficient executive experience to handle men most efficiently and to be able to design and build jigs and dies. Satisfactory references of past accomplishments necessary. Location, Alexandria, Va. Address No. 9107 care Manufacturers Record.

#### MEN WANTED

ACTIVE SUPERINTENDENT capable of taking entire charge of plant manufacturing tinners snips, pliers, wrenches, etc. Desire someone that may have something worthwhile to suggest. CREWE TOOL WORKS, INC., Crewe, Va.

INC., Crewe, Va.

IF YOU ARE OPEN to overtures for new connection and qualified for a salary between \$2500 and \$25,000, your response to this announcement is invited. The undersigned provides a thoroughly organized service of recognized standards and reputation, through which preliminaries are negotiated confidentially for positions of the caliber indicated. The procedure is individualized to each client's personal requirements, your identity covered and present position protected. Established twenty-one years. Send only name and address for details.

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OIL ENGINES, Steam Engines, Motors, Shafting, Pulleys, Hangers. All kinds transmission and motive power equipment. Exceptionally low prices. Write or wire STANDARD MILL SUPPLY COMPANY, 1301 Waldheim Building, Kansas City, Mo.

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For Sale—Motors and Generators, A.C.
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prices. Large Stock. Write for our Price List.
V. M. NUSSBAUM & CO.,
Fort Wayne, Ind.



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Let us serve you when in need of Choice Business or Commercial Properties

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### Complete Furniture Factory For Sale

New machinery; excellent dry kilns; well arranged plant; adequate railroad side track facilities connecting with main line Missouri Pacific; 13 acres of land located just outside city limits of

McGEHEE, ARKANSAS

Sale of plant necessitated by physical collapse of President and Manager of Peerless Furniture Mfg. Co. For further information write

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Increase your bank deposit and help out your fellow-man.

Tell the readers of the

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Through an advertisement in the

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Rates on request

### Steel Manufacturers Please Note!

The Quaker City Iron Works, moving to larger quarters, will sell its present plant at a fraction of reproduction cost.

> A modern Daylight Plant equipped for the manufacture of iron or steel products or suit-able for structural shop, foundry machine shop or warehouse.

BUILDINGS consists of Main Shop, 117'x300'; 3 Crane Runways, Brick Power House, Office Building and Garage. Outer walls throughout practically all glass. Concrete and brick curtain walls. Ground area 58,000 sq. ft.-buildings 41,000 sq. ft. Also additional land and shop, 60'x120',

EQUIPMENT P. R. R. siding (3-car capacity) in main shop. 1 10-ton and 1 5-ton electric crane—4 2-ton hand cranes in shop. 1 2-ton hand crane in runway in yard. Power house has 200 H. P. Heine Steam Boiler, type E; Combustion Eng. Co. Stoker; 200 K. W. Electric Generator; Ames Uniflow Engine; air compressors.

IMMEDIATE POSSESSION

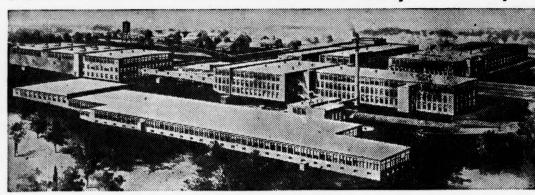
#### QUAKER CITY IRON WORKS

Richmond and Tioga Sts., Philadelphia

REGENT 6841

**EAST 7884** 

### SOUTHERN MANUFACTURING CO., ATHENS, GEORGIA,



BE SOLD AT BANK-RUPT SALE

By virtue of an order of Honorable W. G. Cornett, Referee in Bankruptcy, the property of the Southern Manufacturing Company be sold at auction on May 26, 1931 in the U. S. Court Room at Athens, Georgia, twelve o'clock noon, to the highest bidder for a, all bids subject to confirmation by the Court.

THE PROPERTY is located at Athens, Georgia, with frontage on main line of Seaboard Air Line Railway between Atlanta, Georgia, and Richmond, Virginia.

ATHENS, GEORGIA is situated in the Piedmont Plateau section of the southeast, at an elevation of 800 feet above sea level, and is in one of the healthiest sections of the United States.

EQUIPMENT: Comprises 96 Waste Cards, 66 Cotton Cards, 17,640 Ring Spindles, 10,365 Woolen Mule Spindles of type especially adapted and used for Spinning Waste, 4,320 Pease Ring Spindles, making total of 32,325 of Ring Mule and Pease Spinning equipment; also 1,664 Twister Spindles, and 674 Looms. Complete Sprinkler and Humidification System.

BUILDINGS: Four main buildings, Brick with Gravel Roof.

Mills Nos. 1, 2, 3 and 4; also Slasher Room, Boiler Plant, Warehouses, Opening Room for Cotton for No. 2 Mill.

DWELLINGS: 110 Frame Dwellings, 2 Brick Tenements, 1 Frame Community House, 1 Frame Office Building.

PERSONAL PROPERTY: Supplies, fuel, waste for resale, raw stock, finished goods, nursery, automobiles, machinery held for re-sale, furniture and fixtures, trade marks, and trade names, and all other personal property.

VALUES: The National Appraisal Company in 1928 valued the property as follows:

Replacement value \$2,186,400.50
Depreciated value 1,740,977.60
Now carried on the books with due allowances made for depreciation 1.631,617.78

The above property will be sold free from and/or subject to liens, and to the highest bidder.

For further information apply to:

ERWIN, ERWIN & NIX, Attorneys for Trustees, GREEN & MICHAEL, Athens, Georgia.

A. G. DUDLEY,
ANDREW C. ERWIN,
R. O. ARNOLD,

Trustees in Bankruptcy,
Athens, Georgia.



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**EQUIPMENT** 

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-25 Tons Excellent Condition With or Without Motors.

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#### 10" Water Main at a Bargain

10,000 feet 10" Class B, bell and spigot water main, 12 ft. lengths; good as new and ready for immediate shipment. Located Southwest Virginia.

Nashville Industrial Corporation Old Hickory, Tennessee

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High pressure water tube and H B T boilers at unbelievable prices. We have them in practically every southern state and are scrapping all but the very best. Write us your requirements.

W. M. SMITH & CO.
Box 1709 Birmingham, Ala.

#### BOILERS

2—400 H.P. Springfield water tube, 225 lb. pressure, ASME.
1—150 H.P. 72"x18' Return tubular, 150 lb. pressure, ASME.
1—125 H.P. Locomotive, 125 lb. pressure, ASME.

GENERATOR SETS

200-KVA 220 vt. 3 ph. 60 cy. Burke with Filer Stowell Uniflow Engine.

50 KVA 220 vt. 8 ph. 60 cy. Ridgway with Ridgway Engine.

HEATERS

2—1000 H.P. Cochrane open type feed water heaters.

EXCELLENT METAL WORKING TOOLS

48" x 16' Lodge & Shipley lathe, all geared head, AC motor dr.

38"—60" x 32" McCabe 2 in 1 lathe, belt drive, taper attachment

36" x 36" x 12' Cincinnati planer, belt drive, 2 heads

30" x 30" x 6' Detrick & Harvey openside planer, belt drive.

One side and one rail head

24" x 24" x 8" Cincinnati planer, belt drive, one head

2000 lb. Chambersburg steam hammer, double frame

1100 lb. Niles Bement Pond steam hammer, single frame

No. 1 Nazel hammer, belt drive, cap. 2" x 2"

48" Bickford vertical boring mill, belt drive, very good condition, low price. dition, low price.

113 North Third Street

THE O'BRIEN MACHINERY CO. Philadelphia, Pa. Sewage Engineers and Contractors:

### SEWAGE EJECTOR

City of Atlanta, Georgia, offers for sale one (1) Sewage Ejector. Equipment in general consists of two (2) 250 gallon units compressors, motors and switch boards with all necessary pipe and connections.

Specifications and list of material can be obtained by applying to the undersigned.

Proposals will be received by the undersigned until 3:00 p.m.—June 15, 1931.

The right is reserved to accept or reject any or all bids and to waive technicalities.

LLOYD A. WALKER, Purchasing Agent 4th Floor-City Hall, Atlanta, Georgia



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**SUPPLIES** 



#### A. C. GENERATORS

3 Phase-50 Cycle-220/440 Volt

5 KW.*	1,800 R.P.M	. Western Electric.
25 KVA.	1.800 R.P.M	. Fairbanks-Morse.
30 KVA.	1.800 R.P.M	. General Electric.
37 KVA.		. Burke.
60 KW.*		. Allis Chalmers.
60 KW.*	720 R.P.M	. Western Electric.
85 KVA.		. Fairbanks-Morse.
150. KW.		. General Electric.
225 KVA.*		. Allis Chalmers.
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\*Direct connected exciter.

Just a few of many "ROCKFORD REBUILT" achines available for immediate shipment. mpletely rebuilt, fully guaranteed.

Rockford Power Machinery Co. 626 Sixth St., Rockford, Ill.

#### WILL SACRIFICE FOR QUICK SALE

-1000 K. V. A. Westinghouse Tur-bine Generators; 6600 volts, 3 phase, 60 cycle; 3600 r. p. m. 150 lbs. pressure; 28" vacuum; com-plete with direct connected ex-citers, Le Blanc jet condensers and circulating pumps.

Must be sold and moved within 90 days. Can be inspected any time. Wire or phone for price.

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Overhauled and Tested New Threads and Couplings

Albert & Davidson Pipe Corp.

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#### SALES AND REPAIR SERVICE

TWO COMPLETE 66 and 33 Kv. SUBSTATIONS

Full description and price on request.



A complete stock of transformers 1 to 1000 kva. Modern methods make our repair service second to none. Special service on breakdown jobs.

All transformers guaranteed for one year. Write for Catalog. No. 124-E.

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### 8" GALVANIZED CORRUGATED PIPE

6000 ft. 8" NEW GALVANIZED COR-RUGATED pipe in lengths 16 to 20 ft. Suitable for exhaust drains, water systems, sewers, conduits, etc. Have the necessary connecting sleeves. Priced considerably under the market.

1000 ft. 12" NAYLOR Black asphalted spiral welded slip joint pipe, slightly used.

MARINE METAL & SUPPLY CO. 167 South St., New York City

If you want to get SOUTHERN business advertise in the

MANUFACTURERS RECORD BALTIMORE, MD.

OFFERS BIG BARGAINS IN

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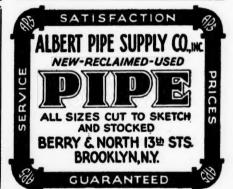
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Large quantity new and used Government material in excellent condition, ready for immediate shipment. Low prices.

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We have just taken up and have available for immediate shipment, approximately 1,000 tons of rail with accessories. Sizes 40 lb., 45 lb., 50 lb., 55 lb., and 60 lb.

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HERCULES POWDER COMPANY Wilmington, Delaware

**RELAYING RAILS — SWITCHES** TRACK MATERIAL

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25 lb. rails—7 steel ties per 15 ft. section. Over ten miles, located Ocala, Fla. Also locomotives, cars, cranes and shovels.

**EQUIPMENT CORPORATION OF AMERICA** 

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#### Shovels or Cranes

FOR SALE

-Factory rebuilt Lima 14 cu. yd. ca-pacity. This machine can be equipped with either shovel, clamshell, dragline or drag shovel attachments. Very rea-sonably priced. Carries new machine guarantee. Located at Newark.

GENERAL ½-yd. combination shovel, backhoe, 2 buckets, and crane boom. Very good condition, located Long Island.

Type B Erie shovel or clamshell ma-chine, good condition. Located New-ark, N. J.

ark, N. J.

Complete Shovel Attachment for Type
"O" Thew. Also, attachment for
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P & H 1½ yd. Gas Shovel. Excellent
condition, very attractive price. Located Newark, N. J.

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We have both Steam and Gasoline Excavators ranging from ½ to 1½ cn. yd. capacity in various parts of the country that will be sold at extremely low prices or leased with leased payments made applying on purchase price.

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Wire or phone at our expense.

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-12-ton Plymouth, 36" ga. Gas.
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-4 yd. & 5 yd. 36" gauge Dump

### DRAGLINES & PUMPS

1—4 yd. Monighan 110' Boom Diesel. 1—2 yd. Monighan 70' Boom Diesel. 1—1½ yd. Northwest—Gas. 3—10-ton Holt Tractors. Dragline Buckets. ½ yd. to 5 yd. 6—2 yd. Lakewood Conc. Dump Buckets.

Gas & Steam Hoists, 75 to 100 H.P.

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Gas Caterpiller Cranes Gas Locomotives Western Cars Sections 20 lb. 24" Tracks Centrifugal Pumps Mixers Hoisting Engines Derricks Compressors Pile Drivers Air Drills Wheelbarrows

Complete stock Contractor's Equipment located Perryville, Tenn., Memphis, Tenn., Atlanta, Georgia, and Washington, D. C.

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### FOR SALE

- 1-11"x13" Clyde Reversible Link Motion Swinging Engine, bought brand new, used thirty days.
- -814x12 W. A. Crook & Bro. Reversible Link Motion Swinging Engine.
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- -Set of 14-3/16" Twin Engines built by W. A. Crook & Bro. First class condition.
- 1-81"x15'9", 150 H.P. Vertical Submerged Tube Boiler, complete, built for 125 lb. steam working pressure. Newly tubed and in first class con-

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GAS OR STEAM

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- 1—Bucyrus, diesel, equipped as 2 yard shovel, also 60 foot boom and 1½ dragline.
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  Several Insleys, Bearcats, and other small crane.
- crane.
  Several Insleys, Bearcats, and other small cranes, drag-lines, and shovels.
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- built.

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  Complete line high pressure pumps, road forms, bins, finishers, caterpillar tractors, and dirt moving equipment.

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Catalog will be sent on request

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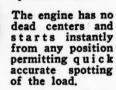
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for bull wheel derricks

Operating independently of the hoist engine, they cut down the swinging time and speed up derrick work.



Also made for Electric Drive. Send for catalog. DAKE ENGINE CO., Grand Haven, Mich.

### 3/8-Yard Buckeye Shovel-Crane

Built to Give Profitable Service



Light enough to maneuver easily, Buckeye's %-yard full-revolving, convertible shovel-crane has the efficient assembly and rugged strength to give steady, profitable performance. . . The one-piece manganese steel dipper has a capacity of .444 cubic yards, struck measure; its teeth are reversible and its digging angles adjustable. 54 h.p. heavy duty gasoline motor, electrically started, is mounted on a solid cast sub-base, forming a complete assembly with the radiator, clutch and two-speed transmission unit. It is power steered, and has fast hoisting, swinging and crowding speeds.

Let us send you complete specifications and the interesting price of this handy contracting equipment.

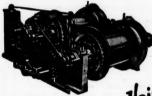
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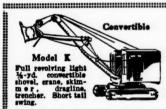
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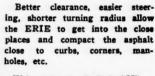
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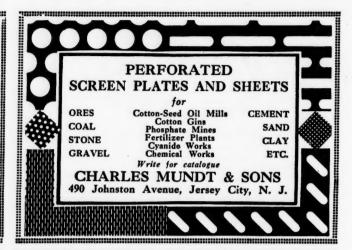
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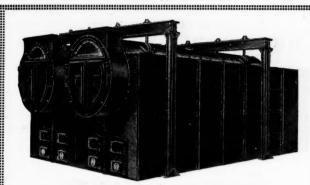




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Ohio Power Shovel Co., Lima, Ohio.
Thew Shovel Ca., The, Lorain, Ohio.

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Thew Shovel Co., The, Lorain, Ohio.

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Ohie Power Shovel Co., Lims, Ohio.
Thew Shovel Co., The, Lorain, Ohio.

——(Gasoline.)
Buckeye Traction Ditcher Co., Findlay,
Ohio.
Harnischieger Corp., Milwaukee, Wis.
Northwest Engineering Co., Chicago, Ili
Ohie Pewer Shovel Co., Lima, Ohio.
Thew Shorel Co., The, Lorain, Ohio.

— (Locomotive.)
Bucyrus-Eric Co., So. Milwaukee, Wis.
Northwest Engineering Co., Chicago, 11
Ohio Power Shovel Co., Lima, Ohio.
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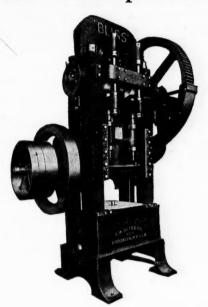
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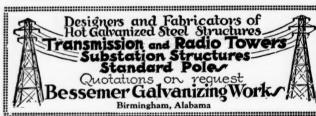
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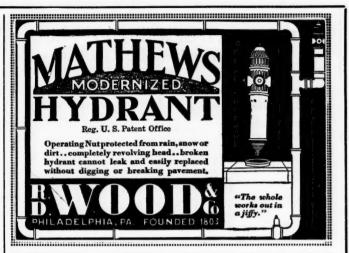
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——(Water Werks.) American Well Works, Aurora, III. Layne & Bowler Inc., Mempnis, Tenn. Manistee from Works Co., Manistee, Mich.

PUNCHING AND SHEARING MACHINERY. Bliss Co., E. W., Brooklyn, N. Y. Whitney Metal Tool Co., Bockford, Ill.

BADIATOR ENCLOSURES.

Manhattan Perforated Metal Co., Inc.,
Long Island City, N. Y

Gulf Refining Co., Pittsburgh, Pa.

BAILROAD Equipment and Supplies (New.)
Bobinson & Orr. Pittsburgh, Pa.

Equipment and Supplies (Used.)
Levis & Co., Henry, Philadelphia. Pa
Smith & Co., W. M., Birmingham, Ala
Southern Iron and Equip. Co., Atlanta
Zelnicker Supply Co., W. A., St. Louis

(Fregs and Switches.)
Bethlehem Steel Co., Bethlehem, Pa.
Robinson & Orr, Pittsburgh, Pa.

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Central of Georgia Rwy., Savannah, Ga
Missouri-Kansa-Taxas Lines, Dallas, Tex.
Model Land Company, Flagler System.
St. Augustine, Fla.
Norfolk & Western Railway, Roanoke, Va
Tennessee Central Railway, Nashville.

RAILS (New and Used.)
Carnegie Steel Co., Pittsburgh, Pa.
Hyman-Michaels Co., Chicago, Ill.
Levis & Co., Henry, Philadelphia, Pa.
Perry, Buxton, Doane Co., Philadelphia
Robinson & Orr., Pittsburgh, Pa.
Smith & Co., W. M., Birmingham, Ala
Southern Iron & Equip. Co., Atlanta, Ga
Sweet's Steel Co., Williamsport, Pa.
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.
Zelnicker Supply Ca., W. A., St. Louis

RAILWAYS (Industrial.)
Easton Car & Construction Co., Easton, Pa

(Marine.)
Charleston Dry Dock and Machine Co.
Charleston, S. C.

RECEPTACLES (Self-Closing — Waste Paper.) Whitaker Paper Ce., Baltimore, Md.

REFRACTORIES.
Harbison-Walker Refractories Co., Pitta-burgh, Pa.

REFRIGERATING Machinery (See Ice and Refrigerating Ma-chinery and Supplies.)

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American Steel and Wire Co., Balto., Md
Carnegie Steel Ca., Pitteburgh, Pa
Connors Steel Ca., Birmingham, Als.,
Dietrich Brothers, Baltimore, Md.
Gulf States Steel Co., Birmingham, Als.
Jones & Laughlin Steel Corp., Pittsburgh, Pa.,
Knoxville Iron Co., Knoxville, Tenn.
Oliver Iron & Steel Corp., Pittsburgh, Pa.
Ryerson & Son, Inc., Jos. T., St. Louis
and New York.
Southern Engineering Co., Charlotte, N.C.
Truscon Steel Co., Joungatewn, Ohio.

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Austin-Western Road Machry. Co., Chicage
Blaw-Knor Co., Pittsburgh. Pa.
Buffalo-Springfield Boller Co., Spring
field, O. Caterpillar Tractor Co.. Peoria, Ill.
Eric Machine Shops, Eric, Pa.
Harris Co., B. W. & Loo, Minneapolis.
Minn.
Huber Mfg. Co., The, Marion, Ohio.
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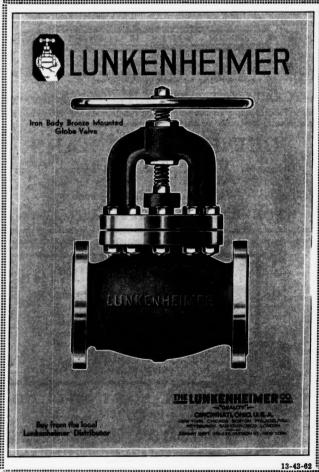
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Youngstown Sheet and Tube Co., Youngstown

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——Tiles.
Federal-American Coment Tile Co., Chicago.

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SAFES. York Safe & Lock Co., York, Penna.

SAND, Arundel Cerp., Baltimore, Md. Friend & Co., Inc.. Petersburg. Va Georgia Sand & Gravel Co., Augusta, Ga.

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SASH (Industrial.) Truscon Steel Co., Youngstown, Ohio

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National Equipment Corp., (C. H. & E. Division), Milwaukee, Wis.

SAWS (Cold Metal.) Earle Gear and Machine Co., Phila., Pa

SCRAPERS (Drag and Wheel.)
Adams Co., J. D., Indianapolis, Ind.
Austin-Western Road Mehy. Co., Chicago.
Harris Co., B. W. & Leo, Minneapolis,
Minn.

SCBAP IBON AND STEEL. Hunts Sons, M. J., Philadelphia, Pa. Perry, Buxton, Doane Co., Philadelphia. Bmith & Co., W. M., Birmingham, Als.

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SCREENING (For Concrete and Road Construction.) American Limestone Co., Knorville, Tenn.

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Pacific Flush-Tank Co., New York, N. Y.

SEWER Joint Compounds.
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Pacific Flush-Tank Co., New York, N. Y.

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--- Material (Tubular.) National Tube Co., Pittsburgh, Pa.

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Whitney Metal Tool Co., Rockford, Ill.

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Bethlehm Steel Ca., Bethlehom, Pa.
Granite City Steel Ca., Granite City, Ill.
Guif States Steel Ca., Birmingham, Ala.
Byerson & Son, Inc., Jos. T., St. Louis
and New York.
Tennessee Coal, Iron & Railroad Co.,
Birmingham, Ala.
Youngstown Sheet & Tube Ca., Youngstown O.

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Ruberoid Co., New York City.

—(Galvanized and Black.)
American Rolling Mill Ca., Middletown.
American Sheet & Tin Plate Co., Pittsburgh, Pa.

SHINGLES (Asbestos.)
Ruberoid Co., New York City.

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Charleston Dry Dock & Machine Co.,
Charleston, S. C.
Newport News Shipbuilding & Dry Dock
Co., Newport News, Va.

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Buckeye Traction Ditcher Co., Findlay, Ohio.

Bucyrus-Erle Co., So. Milwaukee, Wis. Industrial Brownhoist Corp., Cleveland, Onstional Equipment Corp., (Roohring, Instead, Corp., Cleveland, Onstional Corp., Cleveland, Onstional Equipment Corp., (Roohring, Instead, Corp., Chicago, Ill. Ohio Power Shovel Co., Lima, Ohio. Thew Shorel Co., Lima, Ohio.

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SIEVES (Testing.) Newark Wire Cloth Co., Newark, N. J.

SIGNALS (Danger.)
Toledo Pressed Steel Co., Tolede, Ohio.

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Grasselli Chemical Co., Inc., Birmingham

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Brown & Ca., Chattaneega, Team.
Central of Georgia Rwy., Savannah, Ga

Fort Worth Chamber of Commerce, Worth, Texas.
Galveston, City of, Galveston, Texas.
Georgia Power Co., Atlants, Ga.
Missouri-Kansas-Texas Lines, Dallas, Tex.
Model Land Company, (Flagler System),
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Now Orleans, La.
Norfolk & Western Bailway, Roanoke, Va.
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Parkersburg, W. Va., Board of Comparkersburg, W. Va.,

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olds Bros. Lbr. Co., Albany, Ga.
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sssee Central Railway, Nashviib.
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SPRINGS (Machinery, Railway, Spiral Steel.) American Steel & Wire Co., Balte., Md.

—(Wire—All Kinds.) American Steel & Wire Co., Baltimore, Md.

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Southern Automatic Sprinkler Co., Alco Products, Inc., New York City.
Birmingham.

SPROCKETS
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STAIR Steps (Safety.)
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Mueller Co., Decatur, Ill.

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Quil States Steel Co., Birmingham, Al.
Jones & Laughlin Steel Corp., Pittsburgh, Pa.
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Birmingham Tank Co., Birmingham.
Birstol Steel & Iron Works, Inc., Sristol. Va.
Carolina Steel & Iron Co., Greensboro, N.C.
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Chicago Bridge & Iron Wis., Birmingham.
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Hedges Walsh Weidner Co., Chatta
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Ingalis Iron Works Co., Birmingham, Ala
Lancaster Iron Works, Inc., Lancaster, Pa
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Traylor Engr. & Mfg. Co., Allentown, Pa

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Combustion Engr Corp., New York City
Detroit Stoker Company, Detroit, Mich.

STORAGE Batteries.
Electric Storage Battery Co., Philadelphia

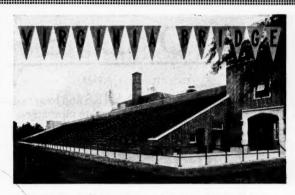
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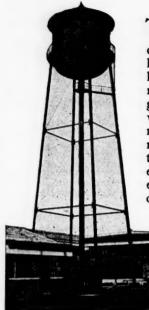
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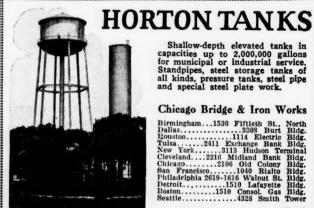
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Schofield's Sons Co., I. S., Macon, Ga.
Titusville Iron Works Co., Titusville, Pa.
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Westinghouse Traction Brake Co., Wilmerding, Pa.

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Air-Tight Steel Tank Co., Pittsburgh, Pa.
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Co., Newport News, Va.

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Air-Tight Steel Tank Co., Pittsburgh, Pa.
National Tube Co., Pittsburgh, Pa.

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Biraningham Boiler & Engr. Co., Birmingham Boiler & Tank Co., Chattanoogs, Tenn.
Chicago Bridge & Iron Wits., Birmingham.
Downingtown Iron Works, Downingtown, Pa.
Ingalls Iron Works Co., Birmingham, Ala.
Pittsburgh-Des Moines Steel Co., Pittsburgh, Pa.
Titusville Iron Works Co., Titusville, Pa.

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United Cork Companies, Lyndhurst, N. J.

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---(Roof.) Hood Co., B. Mifflin, Daisy, Tenn.

--- (Sewer.)
Lee Clay Products Co., Clearfield, Ky.

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TOBACCO MACHINERY.

TOOLS (Measuring.)
Luftin Rule Co., Saginaw, Mich.

TORCHES (Bombshell.)
Tolerio Pressed Steel Co., Toledo, Okie.

TOWERS (Electric Transmission.)
American Bridge Co., New York, N. Y.
Bessemer Galvanising Works, Birmingham.

——(Radio.)
Bessemer Galvanising Works, Birmingham.

——(Steel and Wood.) Chattanooga Boiler & Tank Co., Chatta-nooga, Tenn. Cole Mig. Ca., B. D., Newnan, Ga.

TRACK (Portable or Permanent.) Equipment Corp. of America, Chicago, Ill. Sweet's Steel Co., Williamsport, Pa.

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Caterpillar Tractor Co., Peorla, III.
Clark Tructractor Co., Battle Creek, Mich.
Cleveland Tractor Co., Cleveland, Ohio.
International Harvester Co. of America,
Inc., Chicago, III.

—(Boad.) Allis-Chaimers Mfg. Co., Milwaukee, Wis. Caterpillar Tractor Co., Peoria. III. Cleveland Tractor Ce., Cleveland, Ohio.

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Lansing Co., Lansing, Mich.

—(Meter.)
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TUBES (Boiler.) See Boiler

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Timken Rolling Bearing Co., Canton. O.

TURBINES (Deep Well.)
Cook. Inc. A. D., Lawrenceburg, Ind.

— (Hydraulic.)
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Newport News Shipbuilding & Dry Dock
Co., Newport News, Va.
Smith Co., S. Morgan, York, Pa.

——(Steam.)
Allis-Chalmers Mfg. Co., Milwaukee, Wia.
DeLaval Steam Turbine Co., Trenton, N.J.
General Electric Co., Schenectady, N. Y.
Westinghouse Elec. & Mfg. Co., E. Pittsburgh, Pa.

TUENBUCKLES.
Russell, Burdsall & Ward Bolt & Nut
Co., Port Chester, N. Y.

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Easton Car & Construction Co., Easton, Pa.
Virginia Bridge & Iron Co., Boanoke, Va.

——(Portable for Motor Trucks.) Blaw-Knox Co., Pittsburgh, Pa.

UNIONS.
Dart Mig. Co., E. M., Providence, B. I.

VALVES.
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inkenheimer Co., The, Cincinnati, Ohio.
arco Nerdstrem Valve Co., San Fran-Ludlow Valve
Lunkenheimer Co., The,
Merco Nerdstrem Valve Co.,
cinco, Cal.
Mueller Co., Decatur, III.
Newport News Shipbuilding & Dry Dock
Co., Newport News, Va.
Westinghouse Traction Brake Co., Wilmerding, Pa.

Gincinnati, Ohio.

——(Gate.)
Ludlew Valve Mfg. Ca., The, Troy, N. Y.
Lunkenheimer Ce., The, Cincinnati, Ohio.
Wood & Ca., R. D., Philadelphia, Pa.

VAULTS (Bank and Safe Deposit.) York Safe & Lock Co., York, Penna.

VENTILATORS (Boof.)
Merchant & Evans Co., Philadelphia, Pa.

WARDROBES (Hygienic, School.)
Wilson Corp., The J. Q., New York.

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Softening Apparatus (Purifying.)

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Glamorgan Pipe & Va. Va. Leadite Co., Philadelphia, Pa. Mueller Co., Decatur, ili. U. S. Pipe & Foundry Co., Burlington, N.J. Wood & Co., R. D., Philadelphia, Pa.

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Artesian, etc.)
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Petersburg Va. Virginia Machy. & Well Co., Richmend, Va.

WELL STRAINERS (Brass.) Cook. Inc., A. D., Lawrenceburg, Ind.

WHEELBARROWS. Lansing Co., Lansing, Mich.

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Carnegie Steel Co., Pittsburgh, Pa.

WINDOW Frames and Sask Bayley Co., The William, Springfield, O. Truscon Steel Co., Youngstown, Ohio.

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Michaels Art Bronze Co., Covington, Ky Bayley Co., The William, Springfield, O. ——(Steel Pivoted, Screened.)
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Bayley Co., The William, Springfield, O.

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Jones & Laughlin Steel Corp., Pittsburgh, Pa.
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Senses Wire & Mfg. Co., Fostoria, O.

American Steel & Wire, etc.)
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Guif States Steel Co., Birmingham, Ala.
Youngstown Sheet & Tube Co., Youngstown, Ohio.

---(Fence.) Cyclone Fence Co., Waukegan, Ill.

(Flat and Bound.)
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Boebling's Sons Co., John A., Trenton, N.J.
Seneca Wire & Mfg. Co., Fostoria, O.

——(Galvanised and Annealed.)
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(Welding.)
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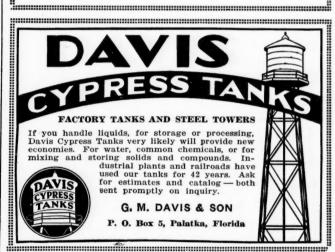
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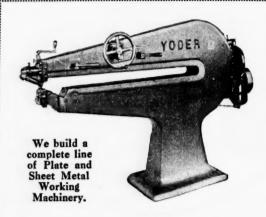
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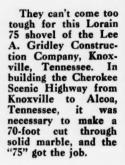
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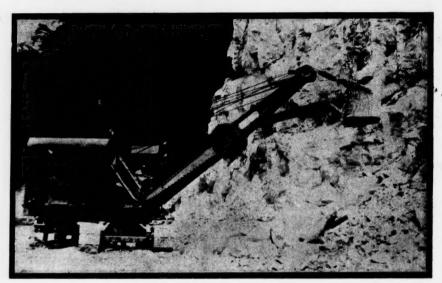
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